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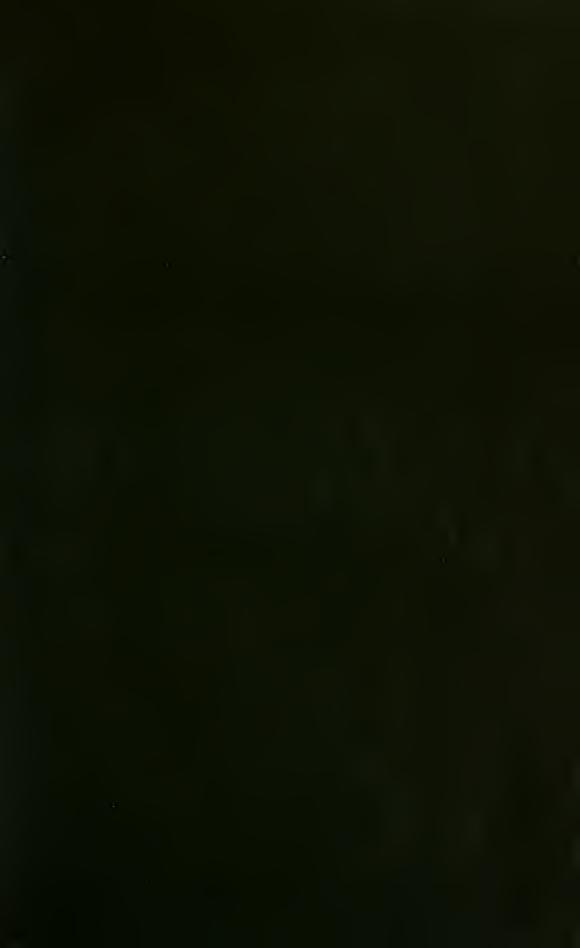
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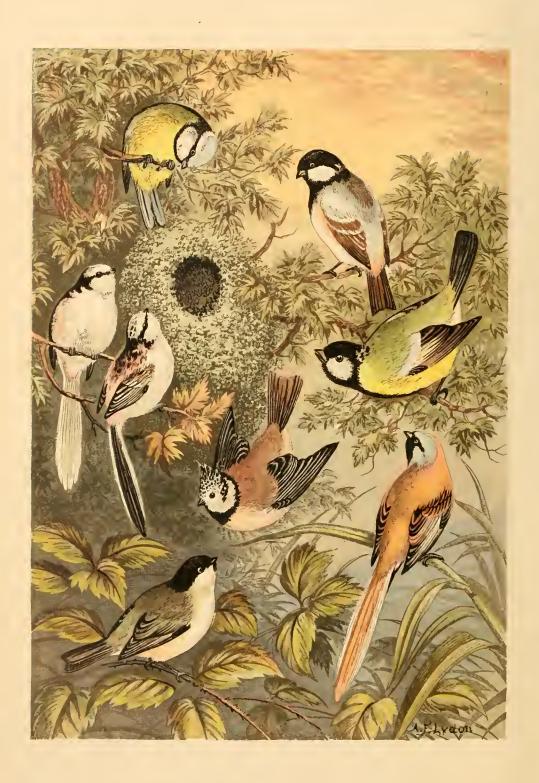
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THE

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SMALLER BRITISH BIRDS

DESCRIPTIONS OF THEIR NESTS, EGGS, HABITS

H. G. AND H. B. ADAMS

ETC,, ETC., ETC.

ILLUSTRATED WITH COLOURED PLATES OF BIRDS AND EGGS

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INTRODUCTION.

THERE are some subjects of which the public are never tired of reading, nor authors of writing, and one of these is Birds. A new book on this subject can never be out of season; provided it is written in a loving and appreciative spirit, always will it find readers, although it may contain nothing particularly original or striking. Year after year the trees bud and blossom, and put forth leaves and fruitage; year after year the beautiful flowers carpet the woodlands afresh with variegated dyes, "paint the meadows with delight," and make the earth one blooming garden; year after year the sweet spring calls forth the native songsters to renew their interrupted melody, and the air is winuowed by countless wings of the feathered voyagers, who pass the winter in warmer climates; and always is the fresh verdure, the unfolding of the flowers, the burst of vernal melody, and all the lovely sights and sounds, and indications of reviving nature, a source of delight to the thoughtful and reflective mind. So it is with a new book on Birds, or Flowers; it is always welcome, for truly has the poet said

"A thing of beauty is a joy for ever."

Our present endeavour is to produce a book which shall give a concise, yet sufficiently full description of the smaller British Birds; not a scientific book, but one essentially popular in its character, rendered attractive by life-like portraits of our feathered clients, drawn and coloured as closely to nature as the eye and the hand of the artist can make them, and arranged in groups which shall at once show their relationships with each other, and affinities with the whole ornithological system. A book that shall be sufficiently cheap for young

purchasers; sufficiently beautiful for the abodes of the wealthy; sufficiently simple and clear in its descriptions to interest the young, and be understood by all; sufficiently accurate to obtain the approval of the scientific teacher. We do not claim for it the character of au educational manual, but that of an agreeable companion for the woods and fields, as well as for the wintry fireside, when

'Tis pleasant to think of the trill of the Lark,
And the song of the Nightingale flooding the dark,
And the sweet mellow strains of the Blackbird and Thrush,
And many a songster's melodious gush;
And back, by the aid of bright memories, bring
The sunshine of summer, the freshness of spring.

We have appended to our description of each group of Birds a few simple directions for their treatment in confinement, not because we advocate their being so kept, but that we would make their lives as healthful and happy, when they are, as circumstances will permit. Some of them, we feel sure, have as much enjoyment, and far less privation, in the cage and aviary, as though they were free to go and come at will, and to birds bred in confinement, and unaccustomed to provide for themselves, release would be positive cruelty. But too often Feathered Pets suffer and die for want of proper care and attention to their nature and necessities, and we would press upon the consciences of those who keep birds, for their pleasure or profit, that they cannot neglect them without offending Him unnoted by whom "no Sparrow falls to the ground."

H. G. A.

THE

SMALLER BRITISH BIRDS.

TITS, OR TITMICE.

THESE members of the sub-family Parinæ form a very compact group of birds, distinguished from all others by certain unmistakable marks and characteristics. They have mostly short, robust bodies, with plumage boldly marked, having strong contrasts of colour; their bills are short and sharp, suitable for insect-hunters, which they all are. Their motions are quick and irregular, and their feet and claws, although slight, are very strong, enabling them to grasp the trunks and boughs of trees very tightly, so that they can search the under parts, and move about with their heads downwards, in which position they are as often seen as in any other; their hind toes and claws are unusually long, an obvious advantage to their mode of life. They belong to the Dentirostral tribe of birds, viz: those having the tip of the upper mandible slightly toothed and hooked.

The Tits are wonderfully active birds, seeming to be almost incessantly in motion; they can fly very well, but do not exercise that power much, generally keeping pretty close to the trees where they find their insect food, on which, however, they do not feed exclusively,

varying it occasionally by seeds, buds, fruits, and grain, sometimes even nuts, the shells of which they are able to break with their strong bills; they pick to pieces the pine-cones, and eat the seeds; of those of the sunflower they are said to be particularly fond. They are partial to the fat of meat, which is often used as bait in the traps set for them.

THE GREAT TIT,

(Parus major.)

PLATE 1 .- FIGURE I.

RANKS first in point of size of the seven British species, which by no means include all the Tits known. The whole length of this bird is rather less than six inches; this includes the tail, which is somewhat short. The colours in the plumage are sufficiently diversified to produce a very striking effect. The top of the head, like the breast, chin, and throat, is black; there is a broad patch of white on either cheek, and a bar of white across the wings, the coverts of which are mostly grey. The cheeks, breast, sides, and flanks are a dull yellow; the legs, toes, and claws lead-colour.

The Ox-Eye Tit, as this bird is often called, may be found in most of the wooded and cultivated districts of England and Scotland, being most plentiful in the southern parts; it is a bold, pugnacious bird, and will fight when occasion requires, desperately; it has been known to spilt open the skull of another bird with its bill, and feast on the brains, therefore it is best kept out of the aviary. On the Continent it is found as far north as Sweden and Russia; it is sometimes known as the Blackcap, from the colour of its head, but this name belongs of right to one of the sweetest of British Warblers. Now Master Tom is not a sweet songster, although he has considerable power and flexibility of voice; he chatters, and screams, rather than sings; except in the pairing time, when he does his own wooing in a really melodious manner, you might fancy when you heard him, that somebody in the woods was filing a saw, or sharpening a scythe. He is not a bad mimic, and when this grating noise ceases, the listener will probably hear what seems to be the sharp fink-fink of the Chaffinch. the clear note of the Robin, or the deleful cry of the Yellow-hammer; then again goes the chur, chur-r, chur-r-r, like the turning of a grindstone, and you know that the bold Ox-Eye is but mocking you. There he is, up among the boughs of yonder old oak, looking for some decayed part into which he can thrust his bill, and extract delicions morsels, in the shape of wood-lice and spiders, grubs and maggots, and such like dainty fare. He visits the gardens and orchards when the buds are on the trees, and picks off a great many, but then they are mostly rotten at the core; he knows that there is a maggot inside of each, which will prevent its coming to perfection. But it is in the woods that the greater part of his life is spent. He is not a very sociable bird, is much oftener alone than in company of others, even of his own kith and kin.

When the time comes for nesting, he and Mrs. Tom just look out for a suitable place, which will probably be a hole in some old wall, or a cavity in a decayed tree, which may furnish at once lodging and food. Then they get together a little of any soft stuff they can lay their bills on-moss, feathers, leaves, or hair; of these they make a loose kind of nest, or merely line the cavity chosen. Sometimes the deserted habitation of a Crow or Magpie is taken possession of; an old flower pot, a broken bottle, the hollow of a pump where the handle works up and down, a Grecian vase in a garden, a letter-box, almost anything and everything which will afford the needful shelter; and there the hen will sit upon her eggs, in number from six to eleven or more, of a white colour, with reddish brown spots all over them, careless of prying eyes, or even of curious fingers, at which she will peck fiercely if they are intruded within her nest. Meanwhile the male takes up his station not far off, and is ready to do battle with all comers who threaten his mate or offspring.

Some have likened the spring call of this bird to "oxeye, oxeye, oxeye," hence its most popular name. This has been heard even as early as the 24th. December, when the ice was an inch thick on the ponds. This call consists of a high and low note, and may be heard half a mile away. Some country people call the bird Sit-ye-down, from a fancied resemblance of one of its calls to this compound word.

THE BLUE TIT,

(Parus caruleus.)

PLATE 1 .- FIGURE II.

This bird, which is perhaps the best known of the Tit family, has a variety of popular names, such as Blue-cap and Blue-bonnet, from

the colonr of his head; Nun, because, we suppose, ho wears a hood or cowl as monks and nuus do; Blue Mope, why? it would perhaps be difficult to say: the bird is not at all mopish, but as lively as a bird need be; but then monastic people are supposed to be so, and this is but a repetition of the monkisk or nuunish title. Then he is the Billy-biter, because he bites the fingers of Billy, or Bobby, or any other foolish boy who goes prying into his nest; and he is also the Hickwall, for does he not pick, and peck, and hick, and hack at the crumbling mortar of the old wall, where spiders lurk, and other insects, for he is a student of entomology. Lastly, people call him the Tomtit, for although not the biggest, he is the commonest, the best dressed, the liveliest, and the most popular of the family. Our readers may take their choice of these names, and call him by that they like best. He is a very beautiful, clever, and amusing little bird, under whatever title he may appear.

Not quite "all the Blue-bonnets are over the Border," for they are found yet in most parts of England, but a good many of them are, being absent only in the extreme north. In Ireland, too, they are not uncommon, and nearly all over Europe their shrill notes may at times be heard; they extend as far north as Norway, Sweden, and the south of Russia; among the islands of Greece they flit and flutter in the sunshine, on the foggy flats of Holland they are not unknown, and the Switzer sees them in his green valleys, that lie beneath and between the great mountains capped with snow. In those bright islands from whence it is said the Canary Birds first came, Master Tommy disports himself, and even in Japan his presence is reported, so that our Blue Tit is quite a citizen of the world. In our own country he is somewhat migratory, moving southward as the cold weather comes on. During the summer ho keeps pretty much within the shelter of the green wood, but towards autumn, when his family cares are over, he may be seen in every hedgerow, and especially in and about the gardens. In the spring these birds are mostly seen in pairs, in the summer in families, and in the winter in small flocks. Their flight from place to place is laboured and nusteady, accomplished by repeated flappings of the wings. Their note is short and sharp, broken up into little bits as it were, like the words zit, zit, tzitzee; tsee, tsee, tsirr, or chica, chica, chirr-r-r. If disturbed on her nest, the hen bird spits like a cat, and ruffies up her feathers, looking very fierce indeed. Many a boy has been scared away by the hissing sound she makes, thinking he has aroused the anger of a snake. If she cannot drive away the intruder by such devices, she will boldly attack him, and bite severely. Hardly anything will induce her to forsake her young, but she will defend them against the Hawk, the Owl, the Magpie, the Thrush, or any other feathered depredator. One has been known to sit still while a part of the tree on which she had built was being sawed off; another who had built in a box hung at the side of the house, did not fly off when the box was lifted off its support and taken into the house, nor forsake her nest, as many birds would have done, when it was replaced; another, who had nested in a letter-box which was opened twice every day to take out the letters, hatched and reared her young in that strange place, without showing any signs of fear at the near approach of her enemy man. Again, there was one, who having built in the hollow of a pump, where the handle is inserted, sat steadily, notwithstanding the noise and motion caused by the working of the pump.

Pages and pages might be filled with a bare mention of the curious places in which the Blue Tit has chosen to build, or rather to lay eggs, for about building very little trouble is taken; almost any hollow place will suffice for the purpose, and a very little of any soft materials will do for the lining of the hole in which the eggs may be found in March or April; they vary in number from eight to twelve, —as many as eighteen have been counted in one nest, and as few as six, in the latter case perhaps some may have been destroyed. Their colour is white with a delicate pink tinge, and reddish brown spots.

A few more curiosities of Blue Tit nidification may be here mentioned. We have spoken of the pump and the letter-box in which the funny bird posted her eggs without any direction, consequently they were never taken out and delivered, but very soon their contents became known, for they flew all over the country. One of these birds, which had no doubt taken the pledge, had her tail worn to a stump by the friction of the pump handle, but she bravely sat out her term, and no doubt taught all her young to be total abstainers. We are told of one who made her nest in a bottle, up and down the neck of which she passed every time she fed her fledglings, ten in number; the bottle was fifteen inches deep, and the neck one inch in diameter, and through this narrow passage every two or three minutes during the day went one or other of the parent birds with a grub or caterpillar, or some insect for the craving little ones. A very strange and ghastly place indeed did one pair of these birds choose for their habitation, viz.: the mouth of the skeleton of a murderer that hung on a gibbet. This was in the old days when the bones of those who had committed great crimes were allowed to bleach in the sun, and rattle in the wintry wind, as a warning to evil doers. All this is altered now; our criminals are rarely executed, and we put them out of sight as soon as possible, as things too loathesome and horrible to be looked on. But the joyous and innocent birds knew nothing of crime and its consequences, and to them the skeleton's head was as good a place to nest in as any other hollow space. Nothing did they know of the thoughts that once passed through those chambers of the brain, of the guilty terrors that must have had a place there, and dared not go forth into the sunshine, as the happy birds did, and return gladly to their home and waiting offspring.

A very gay bird is Master Blue-cap,—as to dress, we mean; blue of various shades is the prevailing colour. It is streaked and banded with white, varied with yellow, which deepens at places into green and brown; he is quite a beau in his small way. About half an ounce being his weight, and four inches and a half his length; a bold. lively, and most interesting bird, a great friend to the farmers and gardeners, although they cannot be brought to believe this, but shoot him without mercy, and have sometimes offered a reward of so much per dozen for Tomtit's heads, forgetting that so persevering a destroyer of insects cannot be other than a friend to them, although he may sometimes help himself to some of their seeds, and fruit, and green stuffs. Mr. Knapp, in his "Journal of a Naturalist," mentions that "An item passed in one of a late churchwarden's accounts was for seventeen dozen of Tomtit's heads;" and a close observer has estimated that a pair of these birds, while feeding their young, destroyed six or seven hundred insects in the course of a single day. Suppose they do this for a month only, taking the lowest of the above numbers, we have 18,000, that is 9,000 to each bird; multiply that by the number of birds whose heads were barbarously wrung off, and ignorantly paid for, we have an army of devastation amounting to 206,000 which these poor slaughtered Tits would probably have killed, if they had been suffered to live. Let our agricultural and horticultural friends think upon this, and

Spare the Tits, the sprightly birds,
The insect hunters, never weary;
They can but chirp, they have no words
To plead themselves, but, ever cheery,
They flit and flutter where they can,
Still doing good, and helping man.

THE COLE, OR COAL TIT,

(Parus ater.)

PLATE I .- FIGURE III.

Almost everywhere in England this member of the Tit family may be seen, and yet it is not very plentiful anywhere; like the Great Tit, it remains with us throughout the year, and is most conspicuous in the winter, because then it is more in the open fields, and in company with others of its own species. It is not a shy bird, like some that shun human habitations, being a not unfrequent visitor in and near to busy towns; even in the great metropolis itself it has been observed.

The Cole Tit is generally distributed over Ireland; it is found in the neighbourhood of Edinburgh, and among the pine forests of the more northerly parts of Scotland; indeed it seems to prefer the pines and firs to any other trees, and in summer time keeps very much in the shelter of the woods. The following is a pretty picture of its habits by the Scotch naturalist, Macgillivray:-"It is pleasant to follow a troop of these tiny creatures as they search the tree tops, spreading all around, fluttering and creeping among the branches, ever in motion, now clinging to a twig in an inverted position, now hovering over a tuft of leaves, picking in a crevice of the bark, searching all the branches, sometimes visiting the lowermost, and again winding among those at the very tops of the trees. In wandering among these woods, you are attracted by their shrill cheeping notes, which they continually emit, as they flutter among the branches; and few persons thus falling in with a flock, can help standing still to watch their motions for awhile." To this Mr. Morris, in his "History of British Birds," adds, "It is also observable how suddenly, without any apparent cause, the whole troop, as if under marching orders, flit in a body from the tree and alight elsewhere, again to go through their exercises, evolutions and manœuvres."

The note of the Colemouse, as this bird is sometimes called, is sharp and shrill, something like zit, zit, zit-tee, che-chee, che-chee, and is so loud, that, like that of the Oxeye, it may be heard a long way off; it is first heard in February at rare intervals, but does not become very constant until about August, by which time a second brood is often fledged, the first being ready to leave the nest in May or June.

A hole in a tree, generally at a less height from the ground than

that chosen by the other Titmice, is the chosen nesting-place of this, the smallest of British Tits; sometimes its eggs are laid in a cavity of a wall near the base, in a hollow in a bank, or even amid the twisted roots of a tree, or a hole dug by a rat, mouse, or mole; the eggs are from six to eight or more in number, white, spotted with red; moss, with a lining of hair or fur, are the materials generally used in the construction of the nest, in which the male and female sit by turns; if intruded on while sitting, the bird makes a hissing noise, and will defend the young with great spirit and determination.

The plumage of this diminutive bird, whose length is about four inches and a quarter, and weight seldom comes up to half an ounce, is not so diversified as that of most other Tits; the crown of the head is black, glossed with bluo; the chin and throat are also black, and the sides near the wings; the back is a dark ashy grey, with a greenish tinge towards the lower parts, and the wings are ash coloured and black, with a bar of white across the lower part. There is a white stripe from the back of the head down tho neck on each side, and a white patch upon either cheek; the tail is brownish grey, with white markings; the feet and the legs are lead-coloured: so there is much harmony of colour, but producing no very striking effect. Like the other Tits, Master Coley feeds chiefly on insects, taking a turn at vegetable food when these cannot be readily obtained; he is fond of the seeds of all kinds of pine and fir trees, and is said by the German naturalist Bechstein to lay up in summer a store of these for winter use, imitating in this respect the foresight of the industrious ant.

THE CRESTED TIT,

(Parus cristatus.)

PLATE 1 .- FIGURE IV.

This beautiful little bird is found in almost every part of the continent of Europe, even the coldest; with us it is very rare, residing chiefly in the northern parts of the island, where there are pine forests, in which it loves to hide, being a bird of secluded habits; no specimen has yet been observed in Ireland. It is what may be called a partial migrant, that is, it does not come to us from over the sea at one time of the year, and leave us at another, but it migrates at pretty regular times from one part of the country to another. They are more sociable

than the Tits generally, keeping together in small flocks. In their movements they resemble the Blue Tit, and in their note the Cole Tit, only that it has a peculiar quaver at the end, which has been likened to a word spelled thus—ghir-r-r-kee.

One of the loveliest and timest of British birds is this, the male weighing only about a quarter of an onnce, and being in length but little more than four inches, it is also one of the least known on account of its shyness; a close observer, if he is only quiet and cautious in his approach, may see it busily engaged in its favourite pursuit among the pines, as other Tits are among the less thick and gloomy trees. Up and down, round and round, tail up, and head down, or in a more natural position, uttering his chirp or shorter cry, and erecting or depressing his conical crest of shining black feathers, edged with white, which looks, when it stands up, like a little Scotch cap, and gives the wearer a peculiarly pert appearance.

The eggs of this bird are from seven to ten in number, spotted and speckled with light purplish spots, on a white ground. In its nesting habits it does not differ from the other Tits, choosing almost any hollow place that may be convenient; sometimes, it is said, hewing out for itself a hole in a decayed tree; that any of the Tits do this has been denied, but the authority of Selby and others, who have witnessed the operation, is sufficient to settle the question.

THE MARSH TIT,

(Parus palustris.)

PLATE I .- FIGURE V.

This bird, although a frequenter of marshy ground, is by no means confined to such; it may be found in wooded and cultivated districts, and amid hills, as well as on salt meadows and marshes near the sea. The margius of streams and ponds, and other places where there is a good growth of reeds or underwood, it seems to prefer, and is not often seen in hedgerows near to public roads. It is not a very common species, although it may be occasionally met with in every English county, as well as all over Scotland, except in the extreme north, and also in Ireland, where, however, it is very unfrequent. It is a constant resident in almost every country in Europe, and has been found in North America, and the northern parts of Asia.

It flies quickly, with an undulatory or wave-like motion, and seems to be scarcely ever at rest, throwing itself into all sorts of grotesque attitudes, as though it hardly knew how to express its joy, and making the woods ring again with its che-chee, che-chee; chica-chica-chee; tzit, tzit, tzit, dea-dee; witzee; the last many times and rapidly repeated. Then it chatters and chirps, and utters a shrill cheep, and sometimes a sharp metallic twink, which is heard even in winter. At this latter season the Marsh Tits become somewhat gregarious, going about in small flocks, which, as spring approaches, pair off, and begin to look out for a nesting place. The pairs are said sometimes to remain attached for life, and to exhibit great affection for each other, the male bird frequently feeding the sitting female. If one is caught in a trap, the other will, if possible, visit the prisoner, and so gets captured also. They are very tender and watchful over their young, as all the Tits are, using almost incredible exertion and care in obtaining them a sufficiency of food; this of course is entirely insects, and the old birds feed on these as much as they can; when this fails, seeds. grain, young plants, and even carrien.

The nest of this species appears to be somewhat more carefully made than that of the Tits generally; it is formed of moss, wood, grass, willow catkins, wool, horse hair, or any other soft substance obtainable; it is placed in the hollow of a tree, sometimes specially made by the bird for the purpose,—so it is stated by Montagn, who has seen the little carpenter at work, and noticed that he carried his chips some distance from the tree, that they might not betray the whereabout of its nest; if this be true, it seems to indicate the possession of a reasoning power, altogether beyond mere instinct. The eggs of this species vary in number from five to nine, sometimes, though rarely, exceeding that number. They are almost round in shape, of a dull white colour, with red spots, plentiful at the thickest end, and almost or quite absent at the thinnest. Towards the end of July the young brood is ready for flight.

About three drachms is generally the weight of the male bird, the length about four inches and a half. The plumage is prettily diversified, although not so gay as that of the Blue Tit; it is composed of brown, black, and white, with the intermediate shades of grey, and tinges of green and yellow. As with the other Tits, and indeed with most of our smaller birds, the female differs from the male in having the colours of the plumage more sobered and subdued, the blacks being less glossy and decided, and greys and browns predominating.

THE LONG-TAILED TIT,

(Parus caudatus.)

PLATE I .-- FIGURE VI.

NEVER surely did a pretty little bird have such a variety of odd and ugly names bestowed upon it. We can understand what is meant by the Long-tailed Titmouse, Pie, and Mag, because the bird has a long tail, and is a chatterer, and therefore may be likened to the Pie, or Magpie; we know what is meant by Bottle-Tit and Bottle-Tom-it makes a bottle-shaped nest; Long Tom and Long Pod may have reference either to the nest or the tail; but why Mum-Ruffin, why Poke-Pudding, why Huck-Muck, and why Mufflin? One catches a glimpse of meaning in the last name—the bird covers and muffles up its young in a large bottle-shaped nest, that has its opening at the side; this nest too may by country people be likened to a pudding, into which the bird is poked; there is a reason for another name; but the rest are as inexplicable as they are comical. But the most wonderful name of all is that by which, we are told, the bird was known to the Ancient Britons-Y Benloyn Gnyffonhir. Will some of our Welsh friends favour us with a translation of this?

Nearly all the Tits are distributed pretty well throughout Europe, and this is no exception to the rule; it is found through a wide range of temperature, from Siberia to Italy. In Asia, also, and the West Indies, it is an inhabitant, so that it is at home in three quarters of the globe, and may be in four.

It is common in this country almost everywhere, frequenting the wooded districts chiefly, where there are plantations, thickets, shrubberies, and tall hedges, there you will be pretty sure to find Tom with the long tail, and this is the case in Scotland, Ireland, and Wales, as well as England.

And what is he like, this ubiquitous Tom Tit? Well, he is not a gay bird as to colour, but a very pretty bird for all that; his plumage is soft and downy, and is much puffed out, so that he looks larger than he really is, his whole weight being not above two drachms, so that he might be sent in a letter for a penny stamp, if it were not for the danger of his getting smothered and crushed. Black, and white, and brown, flushed at places with a rich red, are the chief colours of his plumage; these colours fade one into the

other, and mingle so as to produce all sorts of intermediate tints, and produce a very harmonious effect on the whole. The body of the bird is not larger than that of most other Tits, not so long as some, but its whole length including the tail is about five inches and a half, the tail being at least three inches long; being chiefly black and white, it somewhat resembles that of the Magpie, hence the names Mag and Pye, sometimes applied to the bird.

Nothing can be more beautiful and interesting than the motions of this indefatigable insect-hunter; its habits resemble those of the rest of the family, than any of which it is if possible more lively and active; from the very first peep of day until sunset, it is incessantly in motion, searching here, there, and everywhere about the trees, for food, and flying with extended tail from one spot to another.

"How pleasant it is," says the Scottish naturalist, Macgillivray, "to gaze upon these little creatures skimming along the tops of the tall trees by the margin of the brook, ever in motion, searching the twigs with care, and chirping their shrill notes as they scamper away one after another." "In flying as they do from tree to tree," says Morris, "in an irregular string, they have a singular appearance; they seem so light, and as it were overburdened by the length of their tails, that but a moderate gust might be thought to be too much for them." Meyer says—"Constantly in motion from tree to tree, and flying in a straight line with much rapidity, they remind the spectator of a pictorial representation of a flight of arrows." "Away," says Knapp, "they all scuttle to be first, stop for a second, and then are away again, observing the same order, and precipitation the whole day long." This bird has not so sharp and shrill a note as most of its relatives, all its utterances are soft and pleasing, its twit, twit, and churr, churr, have an inward kind of sound, as if the bird were talking to itself, sometimes its te-te, tse re-re and zit, zit, have almost the melody of a song.

But it is in nest building that our long-tailed friend excels most; no Tit comes near him in that, nor indeed many other birds; it is a most elaborate structure, from five to seven inches long, by three or four wide, presenting in shape the rude outline of a bottle with a short neck; the entrance is at the side, and is so small, that one wonders how the parent birds get in and out, and especially how they manage to stow away their tails. Some of the nests have two apertures, on opposite sides, and out of one a tail has been observed sticking, and out of the other a head, presenting a most absurd appearance. But all the nests have not two openings, although all the birds have long tails, and this is a mystery which we cannot pretend to explain: probably, as the Tits go in head first, they leave their

tails projecting from the door, or they may have some cunning method of doubling them up, and sitting upon them, like an elastic cushion. The nest itself is really a wonderful structure, no wonder it takes a fortnight to build; it is composed of moss, mingled with which are small fragments of bark and wool, bound together by spiders' webs, and the silk-like filaments which surround the chrysalides of some kinds of moths; the lining is generally of feathers, which also form part of the whole nest, which sometimes looks as if it were altogether made of this material, hence the name of Featherpoke, sometimes applied both to the bird and nest by country people: often the latter is very elegant, on account of the coloured lichens with which it is adorued, and generally it very closely resembles in its tints the tree on which it is built, so as to escape observation. It looks likes a mossy excrescence between the branches, where it is usually fixed so firmly by the glutinous cobweb as not to be easily removed. Both birds assist in the making of the nest, carefully working in the materials, and kneading them together with their breasts and shoulders, assuming every variety of attitude to effect their object. Two thousand three hundred and seventy-nine feathers have been counted in one of these nests, which although loose, and often somewhat ragged in appearance, are in reality very firm and compact; they are perfectly water-tight.

The eggs are generally about twelve in number, not much bigger than a pea, sometimes entirely white, but generally having faint red spots scattered sparely over the larger end. The same nest is used by one pair of the birds year after year, and is often patched and repaired, to fit it for continued occupation; sometimes the fresh materials are quite different from those formerly used, then we are reminded of the piece of new cloth sewn into the old garment. The young birds are generally fledged about the end of June, and do not get their full-dress suit until November.

THE BEARDED TIT,

(Parus barbatus.)

PLATE I .- FIGURE VII.

THE Bearded Titmouse, or Pinnock, the Least Butcher Bird, and the Reed Pheasant, are the various names applied to this species, which is a native of Enrope, being abundant in Holland, France, and Italy; it is also found in Asia, on the borders of the Black and Caspian Seas, and many other places. It is known in many of the English counties, but only as a rare bird; no specimen has been taken in Scotland, and only one in Ireland. It delights in marshy situations, where there are plenty of reeds, among which it feeds upon seeds and insects. It is very quick and active, like the other members of its family, climbing up to the tops of the reeds, and dropping to the roots if disturbed, and then creeping up again in that stealthy mouse-like manner which all the Tits have, and on which account they have probably been called Titmice. Their flight is in general only sufficiently high to clear the summits of the reeds, out of the shelter of which they do not often venture, except in winter, when they take a wider range, generally in small flocks of two or three families.

A very pretty and graphic picture of their habits is given by a contributor to Loudon's "Magazine of Natural History;" he had been observing the motions of a flock of them, and says:-"They were just topping the reeds in their flight, and uttering in full chorus their sweetly musical note; it may be compared to the music of very small cymbals, is clear and ringing, though soft, and corresponds well with the delicacy and beauty of the form and colour of the birds. Several flocks were seen during the morning. Their flight was short and low, only sufficient to clear the reeds, on the seedy tops of which they alight to feed, hanging like most of their tribe with the head or back downwards. If disturbed, they immediately descend by running, or rather by dropping. Their movement is rapid along the stalks at the bottom, where they creep and flit, perfectly concealed from view by the closeness of the covert and the resembling tiuts of their plumage." These tints we may here add, are chiefly fawn and delicate grey, lighted up with yellow gleams, and flushes of pink and salmon-colour, shaded with orange brown and black, and relieved with white edgings and markings-a very beautiful combination of tints. This is the Bearded Tit remember; he has no silky crest, like his brother cristatus, but he has a jet black moustache extending from his orange-coloured bill along between it and the eye; these black feathers he can swell out when excited so as to look very fierce, but he is really nothing of the sort, only a timid little creature, that hides away as much as it can, and would much rather fly than fight at any time. It makes its nest, generally towards the eud of April, in mild seasons sometimes earlier, of dry stalks and blossoms of grass, reeds, and sedges, on the ground amid grass tufts, and the coarse

vegetation of the marshes, being the only one of our British Tits that is known as a rule to build on the ground. The eggs are from four to six, rarely more, in number, pinkish white in colour, speekled, spotted, and streaked with purplish brown. This bird like the Mufflin, has a long tail, making the whole length of the male six inches. The female is somewhat shorter, and has a white moustache.

TITS IN CONFINEMENT.

The members of this family are recommended to those who keep cage and aviary birds, by their beauty, activity, and cheerfulness, but they are unsafe birds to turn loose with others, as they are apt to be quarrelsome, and have an unpleasant way of pecking holes, not in the characters of their fellow-prisoners, but in their heads, and sucking out their brains. The Oxeve and the Blue Tit only seem to have this cannibal propensity, and they do not often exhibit it, never perhaps unless pressed by hunger; but after having once done it, the murderer becomes dangerous, being very likely to repeat the act, for sheer love of the newly-tasted food. Bird-sellers say that only the Oxeyes which have forked tails are likely to do so, but this assertion may be questioned, what connection there can be between the shape of the tail and a penchant for brains we cannot understand. The larger Tits then, if kept at all, should be put into cages by themselves; a pair in a cage is best, and it should be of a bell shape, tolerably large, with a round cavity made for a nesting place, as they do not fancy sleeping on an open perch, and are apt to be restless unless covered in.

The liveliness of all Tits renders them very agreeable companions, and in confinement their notes are not so shrill and harsh as they generally are when at liberty. If taken quite young, and placed near good songsters, they will frequently exhibit a power of sustained and melodious song, which one would hardly expect. Bechstein, the great German authority on cage birds, says of the Oxeye that "it has a varied and exceedingly melodious song," and that "even when taken and confined when old, it evinces a readiness to adopt the songs and the call-notes of other birds;" and, as a proof of its dexterity, states that it may be taught to perform a variety of tricks, such as drawing up food and water by a chain, etc. Of the Cole Tit in confinement





he says that "it is an engaging and amusing bird, always in motion, bold, lively, never ceasing to hop and flutter;" of the Blue Tit that "it is recommended by its beauty and lively disposition," and that "it soon becomes tame." According to the same authority the "song of the Marsh Tit, though weak, is agreeable;" he styles this a handsome bird, which he has never been able to keep longer than two or three years.

It will be seen by the above that Bechstein only mentious four out of the seven species which are here described; probably these were all that were known to him as eage birds, and so came within the scope of his subject. Other members of the group have, however, been kept in confinement, and proved as interesting and agreeable as their better-known relatives.

In Bohn's edition of Bechstein, which has much additional matter compiled by the author of the present work, is quoted an anecdote from Knapp's "Journal of a Naturalist," which may be fitly introduced here:-"I was lately exceedingly pleased on witnessing the maternal care and intelligence of this bird (the Blue Tit;) the poor thing had its young ones in the hole of a wall, and the nest had been nearly all drawn out of the crevice by the paw of a cat, and part of the brood devoured. In revisiting its family the bird discovered a portion of it remaining, though wrapped up and hidden in the tangled moss and feathers of their bed, and it then drew the whole of the nest into the place from whence it had been taken, unravelled and resettled the remaining little ones, fed them with the usual attention, and finally succeeded in rearing them. The parents of even this reduced family laboured with great perseverance to supply their wants, bringing them a grub, caterpillar, or other insect, at intervals of less than a minute during the day."

All the Tits, being chiefly insectivorous birds, should have a large proportion of that kind of food, especially when first taken, to reconcile them to confinement. Ants' eggs, meal-worms, small caterpillars, maggots, and anything of that kind that can be procured should be given to them freely. All seeds, and especially those of the sun-flower, they are fond of, oats and other grain, fir and pine cones, nuts, with occasionally a little green food, and small shreds of meat when insects cannot be procured, is the best diet for them They will generally eat the Universal Paste. A frequent change of food is good for them, and plenty of water to drink and bathe in. Their principal diseases are gout, and decline, and giddiness; the two former are said to arise from an immoderate use of the same kind

of food,—fresh ants' eggs and a change of diet, restricted in quantity, are the remedies: for the latter, confinement in a small cage for a time, where the bird cannot turn round and over, and be so excessively active as usual.





WA HILS.

THE WAGTAILS.

THIS is another very distinct group of birds; although closely allied to the Larks on one hand, and the Chats on the other, they have but little resemblance to either in their appearance or habits. Slender in form, with long tails, and legs of more than ordinary length, and very graceful in their movements, with a good deal of white and delicate grey in their plumage, the yellows and greens of which are not very glaring or decided, they may truly be called elegant birds, although the name, Dishwashers, by which they are commonly known to country people, is by no means an elegant term. Their habit of frequenting watery places, such as marshes and moist meadows, where there is a good growth of aquatic plants. amid which beetles and other insects, on which they feed, abound, has given rise to this name. The up and down motion of the birds, like that of people in the act of washing, as they stand by the margin of the ditch, pool, or stream searching for insects, may probably have had something to do with the application of this name, just as the habit of jerking their tails up and down, and sometimes from side to side, had with their being commonly called Wagtails, and sometimes Quaketails.

Of these birds there are five species known as British, all of which our artist has depicted; they all remain with us throughout the year only shifting their quarters to the more southerly parts of the country as winter comes on, and spreading themselves northward again at the approach of summer. *Motacilla* is the name applied to the group in natural histories; this is simply the Latin for a Wagtail. As a rule they have shrill voices, without much compass or melody; their flight is rapid and undulatory. All of them are insect eaters, with long slender bills, claws of moderate length, well curved and rather stout, and broad powerful wings, well adapted for birds that often hunt as they fly.

THE WHITE WAGTAIL,

(Motacilla alba.)

PLATE II .- FIGURE I.

This bird is sometimes called the Grey and White Wagtail; it is found all over the Continent of Europe, but is with us a rare bird, if it be indeed distinct from the common Pied species. Yarrell gives cuts of both varieties, showing the difference between their summer and winter plumage, the latter being much the lightest in colour, and less decided in its contrasts of black and white; in the *M. alba* these mingle very much, and shade off into a delicate grey, but in all there is the black cap, neck, and breast, and one fails to perceive any such marked distinction as would constitute a specific difference. In their habits, too, these birds are so much alike, that the British and Continental species might well be considered as identical.

These birds, ever active and restless by day, haunt the shores and marshes, and more inland places where streams abound. They roost at night among the reeds and brushwood, and lower boughs of the trees which grow in such situations, often as the gloom approaches making quite a clamour, like the Rooks, as though disputing about the most comfortable beds, only their voices are not harsh and discordant, like that of the Corvus or Rook tribe; on the contrary, it is rather sweet, though shrill, and with a kind of complaining note in it. They, too, occasionally visit the gardens, and forage upon the thatched house-tops, under the eaves of which their nests may sometimes be found; but more usually they are placed in holes of walls and banks, under bridges, and amid heaps of stones. Both male and female work at this family dwelling, for the construction of which they collect hay and straw, leaves and fine roots, wool or hair, or anything sufficiently soft for their purpose; these they put loosely together, and make the nest warm and comfortable inside with a lining of wool, hair, or feathers. The eggs are from four to six, or even seven in number, of a bluish white colour, with small grey specks and larger spots of brown all over them, sometimes thicker at certain parts, so as to form an irregular belt. In autumn, when the

young are well grown and strong on the wing, the family go upon their travels southward, to avoid the extreme rigour of the winter; but they do not fly so far as the Warblers, and the Swallows, and other true migratory birds.

The male of the White Wagtail is generally about seven inches long. We need not describe the plumage, it being so like that of the Pied species, only, as we have already said, with more of white and grey, and less of black in it. Sometimes, though rarely, a totally or nearly white variety has been met with.

Bishop Mant, who in his "British Months" gives a graphic and lively description of most of our feathered friends, makes but one short allusion to a bird of this family group, which has reference to their active habits and short sharp note:—

"At hand I greet The nimble Wagtail's brisk te-weet."

THE GREY WAGTAIL,

(Motacilla sulphurea.)

PLATE 11. - FIGURE II.

Sometimes called the Winter, or Yellow Wagtail, which latter name properly belongs to a species presently to be described. This very beautiful and somewhat delicate bird is found chiefly in the southern parts of Europe; although it sometimes makes its appearance in the sheltered valleys of Switzerland. It also inhabits Java, Sumatra, Japan, and other parts of India. Although generally diffused over Britain, it is not common anywhere, and in the extreme north is rarely if ever seen. It is a partial migrant, going northward in the summer and southward in the winter, as a rule, but some individuals probably remain all through the year in one locality. In the coldest weather it has been seen in Yorkshire, and about Edinburgh. In the neighbourhood of streams, rivers, lakes, and ponds it will be most generally found. Seldom more than a pair are seen together; they have a zigzag waving flight, and a weak shrill cry, running with great rapidity along the margin of the piece of water from which they derive much of their subsistence, or over the water weeds, they

hunt eagerly for the insects which harbour in meist places; and very beautiful it is to see their graceful motion, and to mark the flash and flicker of their golden-edged plumage, as the sunshine falls upon it at different angles. Grey tinged with green is the prevailing ground colour of the bird, which has a black chin and throat, edged with white, and a yellow breast in summer, which becomes grey in the cold season; the wings are a mixture of dusky black, grey, and yellow, as is the tail also; the legs and toes, which are small and delicate, are yellowish brown.

The male weighs about five drachms, and is generally from seven and a half to eight inches long, the tail occupying nearly half this length; the wings can be extended to more than ten inches, and when closed, reach to within three inches of the end of the tail.

The nest of the Grey Wagtail is generally placed on the ground, among grass or stones, or in some hole in a bank, rock, or tree, most commonly near water, but sometimes a good way from it. It is a loosely-built structure, like that of most other Wagtails, and formed of the same materials. There is often the same curious choice of a situation as with others of the dishwashing brotherhood; for instance, one pair built in a spout, and another year on a shelf in an out-house, to which access was obtained through a broken pane of glass; one in the window-seat of a dairy; between the switches of a railway, within two or three inches of every passing train, have been chosen by these eccentric birds for hatching and rearing their young, of which they often have two broods in the year.

THE GREY-HEADED WAGTAIL,

(Motacilla neglecta.)

PLATE II .- FIGURE III.

Mr. Gould was the first to make out that this bird was not identical with the common Yellow Wagtail, and he gave it the Latin name neglecta, which signifies neglected. The species is plentiful throughout the central parts of Europe, and is also found in Sweden, Denmark, Lapland, and other countries, as well as in Japan, in India, among the Himalaya Mountains, and in Africa. An insect-feeder, like the rest of the Wagtails, graceful and beautiful, it is a strictly migratory bird,

coming here in April, and departing in September. It has a weak voice, but it is sharper than that of the other Wagtails, with which it does not associate much, being probably too humble and retiring. It is a haunter of moist meadows and marshy lands, where its nest is generally built in holes or hollows, or among the tangled roots of old trees; it is formed of grass, moss, or heath, lined with fine grass or hair. The eggs are about six in number, with mottlings of brown and grey on a whitish ground.

The length of the male is about six inches and a half; it has a black bill with a white band on each side, extending from it over the eyes; the crown of the head and nape of the neck are bluish grey; the chin is white, the throat and breast pale yellow, sometimes approaching to a primrose colour; the back is yellowish green with a tinge of brown, in consequence of the centre of each feather being of that colour; the wings are mostly dusky brown, with yellowish white margins, they extend to within about three inches of the end of the tail, which is long, and slightly rounded at the end. The feathers of this bird are mostly brownish black, with white and yellowish green edgings. The legs and toes, which are black, are not quite so slender as those of other Wagtails.

Between the winter and summer plumage there is a considerable change in the colours of these birds, which Yarrell attributes, not to the growth of new feathers, as is the general impression, but to the old ones taking more fresh and brilliant tints on the approach of the breeding season, and losing them again when this is over.

Ray's Wagtail is the name applied to this bird in some ornithological works, the term neglecta, given to it by Gould, having been found inappropriate, it being a species by no means neglected by continental observers, to whom it is well known, although as rare in this country as our common Yellow Wagtail is on the Continent of Europe. The first specimen shot in Britain was in October, 1834, on Walton Cliffs, near Colchester, in Essex. Yarrell records nine or ten in all which have been taken or seen in this country: since his "History of British Birds" was published others may probably have been secured, but not enough to make it other than a very rare bird with us.

THE PIED WAGTAIL,

(Motacilla Yarrelli.)

PLATE II. - FIGURE IV.

This bird was so named after the naturalist William Yarrell. Gould, in his magnificent "Birds of Europe," was the first to give it this name; hitherto it had been known to science as M. alba. the White Wagtail, two distinct species having been considered and described as one. Gould says of this species, that besides the British Islands, Norway and Sweden were the only countries from which he was able to obtain specimens; while of the White Wagtail he tells us that the place of the Pied variety is supplied, in the temperate parts of Europe, by its lighter-coloured relative; which, although abundant in France, particularly in the neighbourhood of Calais, has never yet been discovered on the opposite shores of Kent, nor in any part of England. The identity of the two species, if two there be, does not seem however to be very clearly made out. Perhaps after all it will be found that M. Y. and M. A. are the same bird in different dresses; several eminent naturalists incline to this opinion. Pending the settlement of this disputed question, we must take the arrangement as we find it in all modern natural histories, and describe our Pied, or White-and-Black Wagtail, as if no such doubt of his two-fold personality existed. He is a very elegant bird, about seven inches and a half in length, of a slender form, like all his near relations; his forehead and sides of the head are white, as are the chin, throat, and breast; deep black with a glossy blue tinge in summer, is the crown and back of the head; there is a semicircular band of the same extending upwards to the base of the bill, where the short bristles project pretty thickly; there is a grey shade on the sides of the neck and along the back, which has in summer a purple gloss, changing to green in some individuals. A glance at our picture will show that there is not much variety of colour, there being little else than black and white; yet these are so prettily mingled, shaded, and contrasted, as to produce a very pleasing effect, which is

heightened by the sprightly and playful manners of the bird. Picking his way daintily, as if he were afraid of soiling his toes, he moves along the margin of the stream or pool, sometimes walking (as it seems) upon the leaves of the water lilies, or other aquatic plants, and ever and anon stooping to pick up an insect whose movement has caught his quick eye. Tired of one hunting place, with a light and easy, though unsteady flight, he seeks another, remaining probably for awhile on the wing, pursuing insects that generally fly above the surface of the earth, gliding over which and swerving to the right or left, as the swallows do in pursuit of prey, he sees another likely spot, and perches upon a rock or stone standing out of the water, and there rests awhile, jerking his tail about as if he were convulsed with inward laughter, or, having lost his balance, were endeavouring to restore it by the help of this balancing-pole; then he looks keenly about him, and presently makes a dart at some unfortunate dragon-fly, that has just unfurled his gauzy wings for a frolic in the air; there is a greenish blue flash, like that of an emerald, a rush of wings, a shrill cry of delight from the bird, and the gay insect is gone for ever; may be it is a water-beetle that has ventured to crawl up the stem of a reed, or to sun himself on the upper side of a leaf; he is seen and pounced upon in an instant. Water-fleas, and spiders, and gnats, and all the small creatures that enjoy their brief period of existence in and about the world of waters, frequently have this greatly shortened by the nimble Quaketail, who is down upon them before they can creep, or fly, or sprawl, or run, or scramble, or swim, or dive out of his way. He is an enemy to the tadpoles, those all-headand-no-body amphibeans who riggle their tails in such a funny manner; and it is said that he sometimes treats himself to a fish dinner, seizing such small fry as minnows and sticklebacks, which he eats nufried or cooked in any way. Sometimes the Pied Wagtail pays a friendly visit to the garden, where he makes havoc among the flies and spiders, and other insects found there; he may occasionally be seen running along the roof of a thatched house, although we do not learn that he pulls out the straws to get at the flies, which the Tomtit is said to do.

The cry of this bird is a sharp cheep, cheep, which it utters quickly and repeatedly, especially when alarmed, when it flies about in a wild wavering manner, as though it had lost the power of guidance; sometimes the strain is pleasantly modulated, so that it may almost be called a song. Beehstein says, "I always keep a Wagtail in my aviary, and in the chorus of the Blackcap, Bluethroat, Lark, and Linnet, it seems to take the alto part. It is also useful in destroying

flies, for which its quick gait and motions seem expressly fitted."

Here is a pretty and graphic picture of the habits of the bird given by Knox, in his "Ornithological Rambles:"—"On the dry days in March, I have frequently seen Pied Wagtails approaching the coast, aided by a gentle breeze from the south, the well-known call-note being distinctly audible under such favourable circumstances from a considerable distance at sea, even long before the birds themselves could be perceived. The fields in the immediate neighbourhood, where, but a short time before, scarcely a single individual was to be found, are soon tenanted by numbers of this species, and for several days they continue dropping on the beach in small parties.

"About the beginning of September, an early riser visiting the fields in the neighbourhood of the coast may observe them flying invariably from east to west, parallel to the shore, and following each other in constant succession. These flights continue from daylight till about ten in the forenoon; and it is a remarkable fact, that so steadily do they pursue this course, and so pertinaceous are they in adhering to it, that even a shot fired at an advancing party and the death of more than one individual, have failed to induce the remainder to fly in a different direction; for after opening to the right and left, their ranks have again closed, and the progress towards the west has been resumed as before."

The Pied Wagtails commence building in April, early or late according as the season may be mild or otherwise. The nest is placed generally near to water, it may be in a hole of a wall or bank; the side of a bridge; in a hellow in a heap of stones; the side of a havstack or wood heap; or even amid the rank grass at the margin of a ditch: but they do not seem very particular as to situation, for one has been found in a turnip field. Grass stems, leaves, small roots, and moss, generally compose the outer part of the structure. and wool, hair, thistle-down, or feathers the inner; these materials are but loosely put together. The eggs are five or six in number, of a longish oval shape, and a bluish white or grey colour; sometimes this ground tint, which has darker grey and brown spots all over it, has a yellowish or greenish cast. They vary considerably, however, both in size and colour. A fortnight suffices for the hatching of the young, and as soon as these can fly and shift for themselves, the parent birds, if they have brought forth their first at all early, prepare for a second brood.

Although a shy timorous bird generally, yet this species sometimes displays great courage and boldness when her young have to be taken care of, or her eggs protected; she is with difficulty driven from her nest, from which she flies but a short distance, and to which she quickly returns, as soon as the immediate danger is withdrawn. Macgillivray, on the anthority of Mr. Weir, gives an account of a pair who built their nest in an old wall close by a quarry, within reach and sight of four men who were constantly working there, and occasionally blowing up the limestone with gunpowder; they flew in and out of the nest without exhibiting the least signs of fear, evidently recognizing the workmen, for if a stranger came near to them they left the nest, and would not return until he had removed a considerable distance from it. Another pair built under the platform at the top of a coal-pit, which was shaken every time the coals came up; they too knew the colliers and the people dwelling close about, and suffered them to come within a few inches of their nest without seeming to be at all alarmed. But the pair mentioned by Mr. Jesse, as fulfilling their parental duties amid the din of a brazier's workshop, where they had built, was perhaps the most extraordinary of all:-"The nest," he says, "was built near the wheel of a lathe, which revolved within a foot of it. In this strange situation the bird hatched four young ones; but the male, not having accustomed himself to such company, instead of feeding the nestlings himself, as is usual, carried such food as he collected to a certain spot in the road, where he left it, from whence it was borne by the female bird to her young. It is still more remarkable that she was perfectly familiar with the men into whose shop she had intruded, and flew in and out without fear. If by chance a stranger, or any other persons employed in the same factory, entered the room, she would, if in her nest, instantly quit it, or if absent, would not return; the moment, however, they were gone, she resumed her familiarity."

Neville Wood relates that a rat-catcher, having left an old wooden trap, with one side gone, in an out-house, he was surprised to see a Pied Wagtail issue from it, and to find its half-finished nest in one corner. He let the trap remain, and soon the structure was completed; in due course five eggs were deposited therein, and on them the hen bird sat fast even when closely approached and looked at. This bird has its peculiar beats or hannts, and the absence of all walls in the neighbourhood induced it to make choice of so singular a nesting place. Mr. Wood has found the nest of this species on the branch of a laurel or other thick bush, and here the structure has displayed more art and ingenuity than usual.

THE YELLOW WAGTAIL,

(Motacilla flava)

PLATE II .- FIGURE V.

This bird is sometimes called Ray's Wagtail, (M. Rayi). It is not quite so large as the Grey-headed species, and may be found in this country for a short time only, generally arriving at the end of March or beginning of April, and departing late in August or early in September. Generally near to streams and watery places, but sometimes in fields and gardens, after a rainy spring when the plough has turned up the moist earth, come the Wagtails, with other birds, to feast upon the wriggling worms and other forms of insect life that are brought to the surface; and it is a pretty sight to see them on the garden lawn, which they sometimes visit, pursuing insects on the wing, after the manner of Flycatchers. They have a graceful and easy flight, and their appearance is very rich and striking, on account of the preponderance of yellow in their plumage; the forehead, sides of the head, crown, neck and nape behind, chin, throat, and breast are all of this colour, which is relieved by the brown and greenish grey of the back.

The length of the male is six inches and three quarters, it has a long slightly rounded tail, and wings that extend to the width of ten inches and a half. Its call is a shrill double note.

The Oatseed Bird, or Oatear, is a name sometimes applied to this species, not, as some naturalists tell us, because it feeds upon oats, or any other corn, for it is wholly insectivorous, but because those extensive upland districts which it frequents are more favourable to the growth of oats than to any other kind of grain, and because, moreover, it resorts to those corn-fields on its first arrival in Britain.

The nest of this bird is placed on the ground, or near it, probably on the stump of a tree, in which there is a sufficient hollow to receive it; dry stalks and grass fibre compose it ontwardly, within it is lined with hair or other soft substance. One has been found made of moss, with a few tufts of grass ontside, and a little hair within. The eggs, from four to six in number, are greenish or

brownish white, sprinkled over with grey, pale rust-colonr, or yellowish brown; some are nearly plain, of a dull yellow colonr, slightly marked; their form is a longish oval. About May the young birds are ready to fly.

WAGTAILS IN CONFINEMENT.

Bechstein describes only three species of Wagtails, viz.: the common Pied, the Grey, and the Yellow; and yet the White Wagtail, which our naturalists mostly speak of as a continental species, must have been known to him. Probably he, with some others, did not look upon this as a distinct species, but merely a variety of the common kind, to which Linnæus applies the scientific name M. alba.

Then again, the Grey-headed Wagtail, of which he does not speak, is said to be common in Germany, and there seems to be nothing in the nature and habits of the bird to prevent its being as suitable an inhabitant of the cage or aviary as any of its congeners. In our account of the Pied species, we have already quoted his high opinion of that bird as a feathered pet; and all the members of the family are evidently great favourites with him, as they deserve to be, for they are very beautiful and attractive birds, lively and yet gentle, and not difficult to tame. If taken when grown up they should be fed upon ants' eggs, mealworms, or insects of some kind, or they will be likely to pine and die. After awhile they will take freely bread and meat cut small, or shredded, and the universal paste, with which a little hard-boiled egg, chopped small, should be mixed. If confined in a cage it should be a large one, with a water-vessel of sufficient size for them to bathe in during the warm weather; but it is best to let them have the run of a spare room or of the aviary, in which they live in great friendliness with the other birds, and help to give a very pleasing variety.

Diarrhea and atrophy, or wasting away, are the diseases from which they mostly suffer. Water impregnated with the rust of iron, and plenty of fresh insect food, are the best remedies; but birds attacked with either of these diseases seldom recover.









PIPITS.

1 Unchard's.
2. Meadow. 3. Red-throaded.
4. Tree. 5. sock.

PIPITS, OR TITLARKS.

THE Pipits form a connecting link between the Wagtails and the Larks; they are the tit, or tiny Larks, being generally smaller than the latter birds, which they closely resemble in their general forms and characteristics, so closely that by the older ornithologists they were included in the same genus. But more careful observation has determined those of later years to form them into a separate group, to which the title Anthus has been given; this is not a very distinctive name, for it means simply a small bird. No doubt naturalists are sadly puzzled to find, or invent, the new names which they are constantly called on to supply, and we cannot expect them to be all very appropriate ones, conveying some idea of the manners, habits, or appearance of the creature named; but for the most part these Latin or Greek derivations do convey an obvious meaning to those who understand them.

But about these Pipits, these small, slender, active birds, with soft plumage, mostly of brown and grey tints, bills of mederate length, straight and slim, wings and tail rather long, although not so much so as those of the Wagtails or Larks; the feet and toes are somewhat long and slender.

These birds are remarkable for vibrating the body when standing; their notes are sharp, weak, and nettered in rapid succession, as if they were scolding or complaining. They may be found in moist low-lying pastures, as well as dry elevated downs, on the sea shore, and far inland, not so much in woods as open spaces, nor in cultivated grounds as on downs and heaths, and amid the wilder scenery of nature. Each species, however, has its peculiar haunts, where a good number of them may generally be found, for they are social birds among themselves, although they do mix much with other kinds. They have a rapid, yet wavering, up-and-down sort of flight, which is not generally sustained to any great distance. Like the Sky Lark, they nestle among the grass, and make a large, neat, and well-constructed nest. Their food is chiefly insectivorous, but they take also seeds of almost any kind they can get.

There are five species known in Britain, of which we shall now give an account.

RICHARD'S PIPIT,

(Anthus Ricardi.)

PLATE III .- FIGURE I.

ONLY a few specimens of this very rare bird have yet been met with in the British Isles, and in no European country is it at all common, little therefore is known of its habits: in appearance it is said very closely to resemble the Rock Pipit, so closely, that only a practical ornithologist could detect any difference between the two species. It is not so much a shoro bird as A. aquaticus, although it sometimes frequents the sea margins and salt marshes near to them.

The whole length of this bird is about six inches and three quarters, it is therefore one of the largest of our group of Pipits; the npper part of its beak is dark brown, the lower much paler, with a vellow tinge; the feathers on the top of the head, nape, back, wings, and upper tail coverts, are dark brown with yellowish edgings; over the eyes and ear coverts passes a whitish streak, more or less distinct in different individuals; like the chin, throat, and whole under part of the body, the outer tail feather on each side is dull white; at the sides of the neck and upper part of the breast there is a tinge of yellow, and the latter is spotted with dark brown; the flanks also are tinged with pale yellow, and the legs, toes, and claws are flesh-coloured, the hind claw being, like that of the Rock Pipit, very long, but not nearly so much curved. On the whole it is a handsome bird, having the long tail of the Pipit genns, and a slender, though well-proportioned body. No full description of its habits has yet been given, few opportunities for observing them having occurred, on account of its rarity: whenever seen it has been always on the ground, where it runs swiftly and easily, sometimes waving its tail up and down with the peculiar motion which is characteristic of the Wagtails. It has a loud shrill note, which may be heard a long way off, and is uttered frequently while the bird is flying.

The name of this species, *Ricardi*, was given to it in compliment to Mr. Richards, a zealous ornithological collector, who first made it known to science by an example taken in Lorraine: it was first

identified as a British bird in 1812, by Mr. Vigors, by means of a specimen taken alive near Londou. Several others have since been captured in this country, three of them also in the neighbourhood of the great metropolis. In Scotland and Ireland it has not yet been seen. Of its nesting habits nothing is known—the eggs are described as being of a reddish white colour, with dark red and light brown spots.

Stevenson, in his "Birds of Norfolk," mentions three specimens of this bird taken in that county, all of them in the flat marshy grounds called "The Deanes," between Yarmouth and Caister; he dissected one, and found only insect food in the gizzard. The length of the bird considerably exceeded that given by most naturalists, being seven inches and five-eighths, with extent of wings twelve inches. This authority also notices that the plumage varied considerably in its colours from those already described.

THE MEADOW PIPIT,

(Anthus pratensis.)

PLATE III .- FIGURE 11.

Sometimes called the Tit Lark, Titling, or Meadow Titling, also the Pipit Lark, Meadow Lark, Grey or Moss Cheeper, Ling Bird. In no restricted group of birds perhaps is there such a confusion of popular names as in the Pipits. Lark, and Pipit, and Titling; Titling, Pipit, and Lark, are applied here and there, and shifted from one to the other, until it becomes an inextricable jumble, and one hardly knows to which bird this or the other name belongs. This arises in a great measure from the similarity of the different species. "Pompey and Cæsar are so very much alike, specially Pompey," that it is hard to distinguish which is which, and no two species so much resemble each other as the Tree and Meadow Pipits, the latter being however the smaller bird of the two, and much the most common in this country, where it remains throughout the year, frequenting chiefly the heathy and hilly districts in summer, and seeking the shelter of the lower grounds in winter. It appears to prefer wild uncultivated districts, and has obtained the name of Ling Bird, from being so often found

where the gorse and ling grow and blossom most freely. In moist boggy places it is not often seen, nor in gardens near to houses, and even cultivated fields and meadows are not much frequented by it, hence its scientific and common names, Anthus—a small bird, pratensis—of meadows, is not quite appropriate.

Like all the Pipits, as well as the Larks and Wagtails, this bird has a jerky wavering flight; it goes up in a kind of zigzag, and curiously enough, does not begin to sing until it has attained a sufficient altitude, not nearly so great as that reached by the Sky Lark, and has commenced its descent, in the first part of which the wings have a singular tremulous motion, but as the bird nears the ground they are spread out motionless to offer resistance to the air, and so break the fall, which would otherwise be too sudden. With a graceful sweep it passes over the spot where the nest is hidden, and the singer, whose strain is a faint reflex of that of the Sky Lark, being neither so loud, sweet, nor varied, alights near to but not directly on, the form of its sitting mate. Quite early in the morning the song may be heard, and when the weather is clear and calm, late into the ovening. Although generally an aërial singer, it is not entirely so, for it will sometimes give utterance to its joy while on the ground, on a stone, or low bush. Neville Wood, who notes this circumstance, says it has been overlooked by authors, and opines that these ground singers may be young birds. as yet incapable of mounting to any altitude, although they have begun to exercise their vocal powers.

This Pipit is altogether a ground builder, and by no means a very neat and tidy one. The nest consists of dry grass and other herbage loosely put together, with finer vegetable fibres, and perhaps a little horse-hair for a lining. It may be found mostly in open fields or commons, or on some wild breezy spot, over the hills and far away from human habitation, in a thick tuft of grass, amid purple heath, or golden-blossomed gorse, or beneath the shelter of a stunted thorn or other low bush. The eggs, from four to six in number, are of a light reddish brown colour, sometimes with a grey or blue tint, mottled and spotted with darker brown; they are generally laid about the middle of April, and the young are ready to fly by the end of May. By the middle of July there is sometimes a second brood.

It is into the nest of the Meadow Pipit that the Cuckoo most frequently drops its egg, "a very apple of discord," as Mr. Steveuson observes, in his "Birds of Norfolk," in which county this species is very plentiful, where it breeds close by the grazing lands near the marsh dykes that drain the soil. "I know of few things," continues our author, "more ridiculous than the great baby Cuckoo helplessly

flapping his wings and opening his month, as he sits on a bush or railing to receive ununmbered delicacies from the beak of his foster-parent." How bright and fresh is the plumage of these Pipits in the early spring, when on a warm snnny day we find them in company with the Whinchat and Stonechat amongst the yellow gorse. Flitting from bush to bush, they rise and fall in the full tide of song, or chase each other in amorous flight; and sad indeed must be the heart that at such a time catches no inspiration from these sights and sounds. Many of these birds in their autumn migrations are killed by flying against the upper windows of lighthouses on the coast.

The Alauda campestris, or Field Lark, as some naturalists call this bird, is about six inches and a half long, and weighs about five drachms; it has a dusky bill with a yellowish brown edging, and from it down the sides of the neck, extends a row of dusky spots; the head, crown, back of the neck, and nape, are brown; the chin, throat, and sides of the neck lighter yellowish brown or reddish white, growing paler at the breast, where the characteristic spots of darker brown; the underneath parts are dull white, with a brownish tinge. After the autumnal moult, all the lighter parts get a faint golden tinge, and the browns become olive. A very beautiful variety of this bird is described by Mr. W. Thompson, of Belfast; the plumage was mostly white and rich primrose yellow, with here and there brown markings, which added to the beauty of the effect.

Perhaps the commonest name for this species is the Tit Lark. It is found certainly in three quarters of the globe-Europe, Asia, and Africa, extending in the first quarter as far north as beyond the arctic circle. With us it is much the most common species of its family. In all places, and at all seasons, it may be occasionally seen and heard, sometimes in a melodious though somewhat weak warble, at others in its ordinary note, a gentle peep, peep, hence probably the name Pipit, or if alarmed a sharp tret, tret. It feeds upon insects of all kinds and in all stages of growth; "in seeking which," says Neville Wood, 'it often turns up small stones on the commons it frequents; beetles, caterpillars, and different crustaceous insects are also devoured with avidity. In winter these birds are less at a loss for food in the event of severe and long-protracted frost, than many birds of the cultivated and sheltered lowlands, and probably a far smaller proportion of them fall a prey to either hunger or cold than our friendly and familiar neighbours, whose numbers are annually thinned by the rigours of our northern winters."

THE RED-THROATED PIPIT,

(Anthus montanus.)

PLATE III .- FIGURE III.

This bird has also been called the Red-breasted Pipit, with us it is a yet more rare species than the one first described. Macgillivray was the first to give a full account of it in his "Manual of British Birds," and Morris claims the merit of having first given a figure of it as a native species in his admirable "History of British Birds." He describes it as being from six to six inches and a half in length, and having a brownish black bill, from whose base a yellowish white line extends over the eye; the head on the crown is ashy brown, with each feather darker in the middle than at the edges; the neck is whitish in the front, having the sides and lower parts streaked with brown. In the spring this part has a rosy tinge, which also spreads over the yellowish grey chin, throat, and breast, which is streaked more or less with greyish brown, which last is the colour of the back, only it is deepened with a slight tinge of olive. The rather long tail has the two middle feathers ashy brown, the outer blackish brown, which, with a purple tinge, is the colour of the legs, toes, and claws.

The scientific name, Anthus montanus, of or pertaining to mountains, given to this bird, would seem to indicate that it was a frequenter of hilly districts. Wilson, the American ornithologist, speaks of it as the Red Lark; Brisson calls it the Pennsylvanian Lark, showing that it is known in America. A variety of names are applied to it by other naturalists, scarcely any two of whom call it by the same name, which seems to prove that but little as yet is known about it. It is not included in Macgillivray's "History," although, as we said before, his "Manual" has an account of it, the latter being the more recent production. His opinion there expressed that it will probably be found not uncommon in the mountainous parts of Scotland, does not appear to have been yet verified, although from its resemblance to the other Pipits, especially A. aquaticus, it may

probably have on several occasions been mistaken for one of the commoner species. Several specimens in the Edinburgh University Museum, which Macgillivray found differently labelled, he believes to be this bird, which Bechstein, Temminck, and Meyer, call aquaticus, as do also Richardson, who found it in the Arctic Regions, and Swainson.

So our red-breasted visitor comes and goes not quite certain as yet of his position in the various systems of classification, or of the name which properly belongs to him. They tell us that his nest is built in mountainous regions, in the neighbourhood of water, but not on the sea-shore: perhaps on the slope of a heathery hill, where the lady birch droops her graceful tresses, and the red-berried rowan puts out its scarlet clusters by the dark still waters of the mountain tarn; where the husky crow of the black cock is heard amid the quietude, and the wild deer comes to drink, and is startled by the hearse caw of the corbie, or the croak of a raven from the neighbouring glen; woe be to the four or five eggs, of a dull grey colour, covered all over with faint brown spots, if they should discover where the nest is hidden.

On the 22nd of March, 1867, S. L. Mosely reports the shooting of a specimen of this rare bird near Huddersfield, where it was found in the company of some Meadow Pipits; this is the second specimen which is known to have occurred in Britain.

THE TREE PIPIT,

(Anthus arboreus.)

PLATE III .- FIGURE IV.

This pretty little bird has a variety of popular names, such as the Field Titling, the Field, Lesser Field, Thick-heeled Field Lark; the Lesser-Crested, Grasshopper, or Meadow Lark; most of them, like its scientific names, conveying the impression that it is a small kind of Lark. It is a migratory species with us, generally making its appearance in the southern parts of the country on or about the 20th, of April, and in the northern counties and Scotland a fortnight later, and

leaving again in September. Although arriving in considerable numbers. the birds do not keep together, but separate to search out eligible nesting-places, the first comers consisting altogether of males, who having found comfortable lodgings invite their lady friends to share, and assist in furnishing them, and then may be heard the song, low and sweet, with but little variety, consisting chiefly of the monosyllables tsee, tsee, tsee, not rapidly uttered, but rather dwelt on, as if the singer thought them very musical, and liked to linger over these simple notes, which he repeats again and again. The practical ear may detect this pleasing melody amid the louder minstrelsy of the woods and fields from May to July, after which it is seldom heard. If the birds are closely watched, a pair of them may be seen collecting materials for their nest, which is formed of fine root fibres, fine grass, and perhaps a little moss, and lined with wool or feathers; it is placed on the ground generally, but sometimes amid the thick lower branches of a bush or dwarf tree; the chosen spot is the skirt of a wood or plantation, where the necessary covert may be found; and here, while the female sits upon the five or six greyish white eggs, which are clouded and spotted with reddish or purplish brown, the male bird expresses his joy by the more than usually rapid utterance of the low sweet tsee, tsee, and by mounting with quivering wings a short distance into the air, and making a sort of half-way house of some projecting branch; then coming down again with a graceful curve, with the wings still or but slightly moved, and outspread tail, nearly always stopping on the same branch on which it had rested when ascending, for a short time before returning to its low-lying nest and waiting mate. When the young have to be fed, both birds are very busy indeed, there is little time for singing or frolicking in the air then. Flies, caterpillars, grasshoppers, worms, or any kind of insect food obtainable, must be sought for, and brought to the little gaping bills that keep asking for more. Some part of the supply the parents must swallow for their own subsistence, but they also cat various kinds of seeds, which they do not give to their young, who require soft animal food as most young birds do.

But what manner of bird is our Pipit? Slender in form, and sober in colour, measuring about six inches and a half in length, weighing about five drachms and three quarters, with a clear brown bill streaked along the edges with yellow, at the base of it are a few short bristly feathers, such as most Larks and Pipits have. Brown, grey, and white, with tinges of green and yellow, are the colours of its plumage, the white breast having the characteristic spots of its family very distinctly marked. The bird stands well up on its long, slender, yellowish

brown legs, and with its dusky brown claws takes a firm grasp of the bough, often the upper one of an elm tree, on which it loves to sit for awhile and join the general chorus of gladness which the sweet spring calls forth from a thousand feathered throats.

Selby finds some points of resemblance between the notes of this bird and those of the Meadow Pipit, and certainly there is some similarity; but a practised ear can easily detect the difference, the former having more melody, and variety, and duration, the latter more character and spirit.

It has been remarked that the Tree Pipit builds much nearer to honses than the Meadow Pipit, for which it is often mistaken, although a practised eye can easily distinguish one from the other; the latter is a much more common bird than the former, which is very jealous of any liberties which may be taken with its nest, sometimes deserting it if only one or two eggs are taken, even if their place is supplied by those of another species which closely resemble them. Although, however, so shy and wary, an instauce is related of the bird's building its nest in a walk attached to the Pump Room at Leamington, which was much frequented by visitors, but so well was it hidden that "but for the indefatigable ardour with which the male bird pursued his manual labour near the spot, the observant ornithologist would never have suspected its presence." Having made the discovery he watched the proceedings of the happy pair, and noticed that the singer sometimes took his turn on the nest for about an hour, and while there he was more cov and jealous of approach than the female, betaking himself to hasty flight if only looked at, while the hen was more fearless and judicious, creeping silently out if disturbed, and going some distance from the nest before she spread her wings, so as not to indicate the precise spot where her treasures lay hidden. Here was displayed, as it often is in birds and other creatures, the motherly instinct approaching very near to reason.

All throughout the European continent is the Tree Pipit found, although sparingly in the colder parts; it is plentiful in France and Italy. In Japan and some other parts of Asia it is known to be, and in Africa, where, like many of our summer unigrants, it probably passes the winter. In our western counties, and in Wales, it is a very rare bird. No record exists of its having been seen in Ireland that we are aware of. It occasionally visits the Orkney and other Scottish islands.

THE ROCK PIPIT,

(Anthus aquaticus.)

PLATE III .- FIGURE V.

This is another common member of the Pipit family, a haunter, as its name implies, of hilly and rocky places by the sea. It is variously called the Rock, Sea, or Shore Lark; the Shore Pipit, or Sea Titling, as well as the Field, or Dusky Lark; its Latin name comes from aqua, water. It is a very hardy bird, braving the severe cold of the regions of ice and snow, and yet being able to live in comparatively warm climates. It is well known in most parts of the Continent of Europe: a species very like it, if not the same, inhabits North America, and also Japan. In its general habits, mode of flight, appearance, and song, it so closely resembles the two species already described, that until quite lately it has been confounded with them; the name obscurus, under which it appears in some natural histories, indicates its once doubtful position and identity.

About six inches and three quarters is the usual length of the male bird; its weight about seven drachms. Brown, grey, and white, tho latter in no part pure and unmixed, but more or less specked, and tinged with yellow and brown, are the colours of its plumage; there is the same yellow edging to the dusky bill as we noticed in the two former species, and the same olive tint, vivid or faint according to the season, is a marked feature of its by no means gay, yet pleasing and harmonious dress. As with the other Pipits, the plumage of the female is much like that of the male.

A mere flitting from place to place constitutes the ordinary flight of this bird; during the season of incubation, the male will sometimes soar up a short distance, and sing its small shrill song of gladness, as it descends again in a slope like a wind-driven summer shower.

Its general note is a peevish kind of cheep, sometimes long drawn out; heard on the wild rocky and lonely shore it has a sad and dreary sound, but it comes from a lively little bird that enjoys its life while the sunshine lasts, and puts up with the privations of winter as bravely as it can. Early in spring it may be seen all along the Kentish, and indeed of most other of the English coasts,

far inland from which it is seldom if ever found; making preparations for its nest, flitting bither and thither, gathering up stray fibres of dry grass, marsh and shore plants, moss, and even the finer kinds of sea weeds, of which its nest is made, generally on a low shelf of rock, near the sea, where there is a little vegetation to shield and keep it fast, or it may be in a hole a little way up, by which the tamarisk and sea pink flourish, and the horned poppy puts forth her yellow blossoms to beautify the place. Sometimes the nest is placed on the ground sheltered by a bush, on some slight eminence, always loosely constructed, never far from the sea, in whose fresh breezes the little bird delights.

The eggs may be four, five, or six in number, of a dingy white, pale yellowish, or grey colour, for they vary much in this respect; they sometimes have a tinge of green, and they are spotted with reddish brown, often so thickly at the larger end as to become confluent, or flowing together, and so taking possession of the whole surface. These eggs are in general rather larger than those of the Meadow Pipit, their average weight being about thirty-six grains. The young are hatched quite early in the spring. If the hen is disturbed while sitting, she rises and hovers over the place, uttering a shrill complaining cry, and showing how anxious she is by her restlessness.

The Rock Pipit is remarkable for the extreme length of the hind claw, which is much curved at the extremity. Like all the Larks and Pipits, it has long slender legs, which lift it well up out of the water, amid which and the sea-weeds on the shore it searches for the marine insects and smaller crustaceous animals on which it chiefly feeds.

On all the British coasts, as well as on those of Ireland, Scotland, and Wales, it may be found, sometimes in considerable numbers; its flight even in winter seldom extends beyond the marshes contiguous to the sea, so that in inland counties it is little if at all known. The great traveller and naturalist Waterton, of Walton Hall, found it among the sea-birds at Flamborough Head, where its weak cry must have been drowned amid the clamour of the winds and waves, and of the Anks, Penguins, Gulls, and other ocean screamers which inhabit the precipitous heights and narrow ledges of the rocks that present so bold a front to the rolling waves of the German Ocean.

Stevenson notices that in Norfolk, although a few of these birds appear regularly on their spring and autumn migrations, yet the specimens obtained are extremely rare, owing probably to their specific distinctions being little known; if shot they are likely to be mistaken for the more common species, and thrown away.





PIPILS.

1 = ara's. 2. Meadow. 3. Refeter to .
1. Tree. 5. Rock.



PIPITS IN CONFINEMENT.

Four members of the Pipit family are spoken of by Bechstein as cage birds, viz: the Tit Lark, which is the Meadow Pipit of our group; the Field Lark, about the identity of which we have some doubt, as the description given would suit several species; the Meadow Lark, which is probably our Tree Pipit; and the Water Lark, our Rock Pipit.

Of the first of them he says that its song, though consisting of only three passages, ernamented with trills and shakes, is pleasant. In a wild state it sings from the end of March to July, in confinement from February to the same period. It is a most amusing bird, attracting attention by its slow and thoughtful gait, the constant motion of its tail, and its attention to its own neatness and cleanliness. In the aviary it requires a varied dietary, and besides the usual paste should occasionally have the nightingales' paste, crushed hemp, and sweet curds or mealworms; the latter diet, with grasshoppers and ants' eggs, are recommended as food when first taken, mixed with the paste in gradually decreasing quantities, until the bird becomes accustomed to it. The young may be reared on ants' eggs and bread soaked in milk, mixed with a little poppy seed. They are very docile, and learn to imitate, though in an imperfect manner, the notes of other birds kept with them, especially those of the Canary.

For the management of what he calls the Field Lark, this author gives no directions. Probably the foregoing will suit it very well.

The Meadow Lark, he says, may be allowed to range the room, or be kept in a Lark's cage, which, like that of the Tit Lark, should have a couple of perches. In the aviary it is difficult to feed, and can only be inured to the universal paste by a plentiful admixture of ants' eggs and chopped mealworms, which, mixed with soaked bread and meal, are its favourite diet. Diarrhæa and atrophy are its chief diseases. It is a very pretty and agreeable cage bird, with a full, clear, and melodious song, more full and varied than that of the Tit Lark, with some warblings in it that remind us of the Canary.

The Water Lark is easily tamed, and will do well in a Lark's cage with perches, or with the free range of the room; it will take the universal paste after a little while, if coaxed into it with the usual

bait of mealworms, and also poppy and crushed hemp seeds. With Bechstein this is a favourite bird. It usually sits still upon its perch, but moves its tail backwards and forwards almost as fast as a Strand Snipe. Its short intermitted song resembles that of the Siskin or Swallow, with occasionally a shrill harsh note introduced like the sharpening of a scythe: its call or alarm note is hish, hish. It is a very cleanly bird, fond of bathing as are all the Larks and Pipits. They also require fine clean sand to dust themselves with.

In reference to this as a cage bird, Mr. Blythe thus wrote to Charles Waterton, Esq., in 1835:—"My Rock Pipit is still doing well, and has already become tame, or rather, fearless; but most birds very soon lose their wildness, when placed in a cage containing several tame companions. It seems likely to live at least as long as I shall want it; when I have become a little more acquainted with its cage manners, I will send you some account of the habits of my amusing little prisoner." Whether this account was ever sent, we cannot tell; we have looked in vain through the published writings of Waterton for it.

Pe-peet! pe-peet! list to that peevish cry,
For such it seems, and yet no fretful bird
The utterer. See, he hath a bold, bright eye,
And quivering wings that are with rapture stirred.
Not 'mid the rocks, and by the sounding sea,
His plaintive cry he giveth to the wind,
But, well content, he asks not liberty,
While he gets shelter, food, and treatment kind.

H.~G.~A.

THE LARKS.

FROM the Pipits we pass very naturally to the Larks, members of the same family group, and only lately placed in a separate genus, under the Latin title Alanda, that word signifying a Lark. Of this genus there are five British representatives, the same number as there are of the Pipits and the Wagtails; the Tits give us one more species to number among British Birds.

Macgillivray, in his "History," makes this genus Alauda a very restricted one, including only three species, viz: the Shore, Sky, and Wood Larks; so also does Morris. Yarrell gives four, adding to the above list the Short-toed Lark, a very rare bird in this country, which the first-named authority, in the "Appendix of Recently Observed Species," added to his "Mannal," also notices, with the Crested Lark, thus completing the list of those we shall have to describe. It may be here mentioned that according to Stevenson only the three common species of Larks have yet been observed in Norfolk, except a single specimen of the Shore Lark.

Very pretty and sprightly creatures are these Alaudine Birds, all of them good songsters, and one the very sweetest and cheeriest singer that ever soared aloft in the sunshine, and gladdened the ear of man with music. All graceful and slender birds, with longish legs and beaks; all plain birds as to their plumage, which is mostly brown and white; all ground builders, like that familiar one that hath

"It's nest among the gorses," And its song in the star-courses."

Feeding alike on insects and seeds, and perhaps more on the latter than either the Tits, Wagtails, or Pipits, to all of which they present some points of resemblance, either in their habits or conformation, sometimes in both. They are found all over Europe, and one species at least is known as a native bird in America.

Except the Wood Lark they all seem to prefer the more open grounds, where they search the fields, pastures, and marshes for food. They do not leap or hop when on the ground, but walk or run; and when on the wing they fly rapidly, but not generally in a direct manner, their flight being wavering, or undulated, as it is called. They are hardy birds, living through our most rigorous winters, and braving the cold of very severe climates. The Wood Lark appears to be the most delicate of the genus; it is more plentiful in the south than the north, and has not been met with in Scotland.

Larks belong to the division of birds called *Conirostres*, those having strong conical-shaped bills, adapted for breaking up hard seeds or grain, on which many species of this order live almost entirely.





LARES.

1 Shore. 2. Shirt-toed. 3. Wood.

4 Sky. 5. Crested.

THE SHORE LARK,

(Alauda alpestris.)

PLATE IV .- FIGURE I.

This bird, which is found in the northern parts of Europe and Asia, and plontifully in America, is with us a very rare species, the taking of only four specimens here having been recorded: one in Norfolk, one in Lincolnshire, and two in Kent. It is about seven inches in length, that is, a little smaller than the Skylark, which it resembles in shape, having a rather full body, short neek, moderately sized head, and long wings and tail; the plumage however is more marked and decided in its contrast of colours; which in the upper parts of the body are pale brownish red, marked with dark brown, and the lower parts white, clouded at places with brown. There is a band on the top of the head, in the summer, of black, and another extending from the beak to beneath the eye, and thence down towards the neck, which is divided from the breast by another black crescentshaped band; these marks, upon a white ground, stand out very distinctly in the summer plumage; but in the winter they are not so plain, the white being more dusky, and the black not so intense. British naturalists have had few opportunities of observing the habits of this bird, which is sometimes called the Tufted or Horned Lark, because, like the Sky Lark, it can erect at pleasure a crest of feathers on the top of the head. Its common and scientific names would imply that it is a haunter of shores, and such lonely and wild places. From the American naturalist, Audubon, we learn that it breeds in the high and desolate tracts of Labrador, in the vicinity of the sea. The face of the country appears as if formed of one undulated expanse of granite, covered with mosses and lichens, varying in size and colour-some green, others as white as snow; and others again of every tint, and disposed in large patches and tufts. It is in the latter the Lark places her nest, which is formed with much care, the moss so closely resembling the bird, that unless you almost tread on her as she sits, she seems to feel secure, and remains unmoved. Should you, however, approach too near, she flutters away, feigning

lameness so cunningly, that not one accustomed to the sight can scarcely refrain from pursuing her. The male immediately joins her in mimic wretchedness, uttering a note so soft and plaintive, that it requires a strong stimulus to force the naturalist to rob the poor birds of their treasure.

The nest is embedded in the moss to its edges, it is composed of fine grasses circularly disposed, and forming a bed about two inches thick, with a lining of feathers. In the beginning of July, the eggs are deposited; they are four or five in number, large, greyish, and covered with numerous pale blue and brown spots. The young birds leave the nest before they are able to fly, and follow their parents over the moss, where they are fed about a week.

THE SHORT-TOED LARK,

(Alauda brachydaetyla.)

PLATE IV .- FIGURE II.

If we dissect the above scientific name of this, to us, rare species, we shall find that it consists of three Latin words—Alauda, a Lark; brachus, short; and dactylos, a finger, indicating a peculiarity in the foot of the bird, which distinguishes it from the other species of its genus, all of them with which we are acquainted having remarkably long hind claws, while this has them unusually short.

Its claim to a place in the list of British Birds rests upon a single specimen taken in a net near Shrewsbury, in October, 1841. It is described as differing but little from the Wood Lark, than which it has a stouter bill, a breast more plain and unspotted, and the hind toes much less elongated.

Temminck says that this bird is very abundant in Sicily, and is found generally along the shores of the Mediterranean, in Spain and the southern and central parts of France; its northern range appears to extend to Germany, among the birds of which country it is included by M. Brehm. It is said to feed on insects and seeds, to make its nest upon the ground, and lay four or five eggs of a dull yellow, or pale coffee colour, without any spots. Gould says, that between the plumage

of the male and female bird, the only distinction of colour is that in the latter the tints are somewhat duller. During the first autumn the young may be distinguished by the buff edgings to their feathers.

This is not a very full and satisfactory account of our pretty foreign visitor, but it is the best that our authorities, the British naturalists, enable us to give, so we must be content therewith.

THE WOOD LARK,

(Alauda arborea.)

PLATE IV .--- FIGURE III.

NATURALISTS give to each of the creatures they classify two names, one generic, indicating the genus; the other specific showing the species; the greater divisions are classes, orders, and families, with which wo need not trouble ourselves; and each of these names has a meaning, the understanding of which greatly assists the student of ornithology, or any other oology. So if our sweet chanter of the woods were to send in her card, we should know at once, first that she was a Lark, and next that she was of, or belonging to, the trees-a Wood Lark. She has also been called A. cristatus, because she has a crest, which, however, is not a great distinction, for nearly all Larks have this. although they do not so often erect it into what in the human head is called a "Brutus," (why we cannot tell,) as the Sky Lark does. Yet another name has our shy songster—A. lulu, because some of her notes have a monrnful expression, like lu-lu, lu-lu, long drawn out. It is a sweet strain, nevertheless; some have compared it to that of the Nightingale, but it wants the fulness and richness of melody which so delights the ear and satisfies the mind, as we listen to the dulcet notes of Philomel, the Queen of Song, as the poets have well called this favourite bird

If you want to hear the Wood Lark in her greatest perfection, go in the nesting time, the season of love, when the bird's life is most full of joy and happiness. Go where the grassy meadow or the cornfield runs up close to the leafy woodland; there you will see the happy creature springing up from the ground, where its nest is hidden, much as the Sky Lark does, singing all the while, not so shrilly nor leadly as that.

"Bird of the wilderness,"
Blythesome and cumberless,"

but more softly and sweetly. Up it goes, sometimes straight up, but generally in a slanting direction, till it reaches a considerable height, from whence its soug sounds like an echo of far-away music, although it is never lost to view, as the Sky Lark is, nor does it remain aloft so long as that bird does, but soon begins its rapid descent, until, still singing, it comes back to the nest, where its mate sits covering the four or five pale yellowish brown eggs, about ten-twelfths of an inch in length, and seven-twelfths and a half in breadth; they are freekled with umber or greyish brown, and sometimes have a few irregular dusky lines at the larger end. The nest is usually made of dry grass, and lined with finer grass and hair. Throughout the greater part of the year the song may at times be heard by those who listen for it, but, except at nesting time, it is mostly in the woodlands, and is not easily distinguished, being faint and low, although very musical.

Like the Sky Lark, this bird resides with us throughout the year. and it is in the winter when the woods are bare that it is mostly seen, for it is very shy, and hides itself from observation very much in the leafy season; it is found mostly in the southern and midland counties of England, and everywhere is much oftener heard than seen: among the ferny combes and wooded dales of Devonshire it is perhaps more plentiful than in any other part of these islands, although it may be found in most sheltered places where there is quietude and covert, and if this be within easy reach of a town or village, there do the bird-catchers spread the snare and lime the twig for the capture of this sweet songster, which is too often penned up in a small, dirty, and perhaps perchless cage, and exposed to the burning sun or sharp easterly wind without shelter of any sort. People should remember that the wild life of a bird, which is passed in the open air, where it is subjected to all extremes of heat and cold, is incessant; a life of constant activity is that of the bird,—of muscular exertion, keeping the blood in a rapid state of circulation, and preserving the vital heat of the system; the quick vibrations of those speckled wings, and frequent changes of position, cannot be effected without calling into play different sets of muscles, and light as the body may seem to us. and buoyantly as it floats upon its wings, and easily and gracefully as it glides and turns this way or that, yet there is considerable effort necessary on the part of the aërial voyager to maintain his position, and steer his course to the desired end. Think of this, ye who like to have caged birds about you, and do not keep a poor captive

shivering in the blast, or melting in the sun, from neither of which can it seek shelter, when still, as it would in a wild state. But we have kept our sweet warbler waiting, while we have been pleading his cause with the thoughtless, who are often not intentionally cruel, for, as Thomas Hood says,

"Evil is wrought for want of thought,
As much as for want of heart."

According to Stevenson, the Wood Lark is by no means common in Norfolk, although it is known to breed there. Thompson includes it in his "Birds of Ireland;" but Maegillivray knows it not as a bird of his own northern land. On the continent it is chiefly found in France, Holland, Italy, Greece, and other parts of the Levant, where it is a constant resident. The Danes, Swedes, and Russians know it only as a summer visitor. It has been found in Asia Minor: and what is it like? Why very much indeed like the common Sky Lark, so much so that one can scarcely detect the difference; the slight points of divergence are smallness of size, the length of this species being about six inches, while that of "the Ethereal Minstrel" is about six inches and a half. Then this one has a more slender bill, a shorter hind claw, and a somewhat differently shaped wing; the crest feathers are longer; there is a redder tint in the plumage of the upper parts of the body, and the whole of the under parts are yellowish, instead of brownish, while the dark spots on the lighter neck and throat are drawn out more into lines.

Always is the nest of this bird built on the ground, commonly in a thick tuft of herbage, or under a low bush; it is not often found near to houses, neither is it usually in woods or copses, although generally near to such leafy covert as the bird delights in. Several curious deviations from the usual nesting habits of the bird have been observed; the chosen spot in one case was a slight cavity in the trunk of an aged oak tree, which had recently been cut down; it was close by a hedge, on the other side of which was the road, and was well conecaled from observation by tall grass, which had grown up around the fallen monarch of the wood. In another case it was the bottom of a lawn near to a residence, in the long grass by a low sheep-shed; the old bird when discovered left the nest and feigned death, but made off through the grass when an attempt to capture her was made. Yet another was under a dead fence in a park, near by where the woodman's axe was constantly going, and labourers and others passing to and fro.

THE SKY LARK.

(Alauda arvensis.)

PLATE IV, -FIGURE IV.

Perhaps the sweetest and cheeriest of all our native songsters, is the little brown and grey bird, commonly known as the Sky or Field Lark, in Scotland called the Laverock; no other bird has a song at all like it. We do not mean to say that it is as rich and melodions as that of the Nightingale, as soft and mellow as that of the Blackbird, as varied and flute-like as that of the Thrush. The Blackcap, the Goldfinch, and the Linnet, when uttering their wood-notes wild, may, by some, be considered more accomplished musicians; but for joyousness and utter abandonment to the sweet ecstacy of singing for the mere pleasure of doing so, there is nothing in the whole range of birdmusic that at all comes near it. To see that little bird spring up from its grassy bed, and go soaring sunward on fluttering pinions, its whole frame quivering and trembling, as it seems with delight, and to hear the rain of music that falls from that mere dot in the sky, is something to wonder at and rejoice in; the joyous creature is indeed, as Shelly says, in that which is perhaps the most perfect lyric in our language:-

"Like a poet hidden
In the light of thought,
Singing hymns unbidden
Till the world is wrought
To sympathy with hope and fears it beded not."

To lie upon a grassy slope in the warm sunshine, with that sweet melody filling the ears and the heart to overflowing, is like a dream of happy childhood, and of all things fair and heavenly.

To sit, as we have done, by the grave of one beloved, called early to his rest, and hear several of these birds singing together far up in the blue heavens, was like receiving the visitation of angels, and hearing the songs with which they cheered the sorrowful as they sped back to their celestial home; songs which told of a land of pure delight, where the lost shall be found again, and those who sorrowed and sighed upon earth shall be happy for evermore.

Wordsworth addresses this bird as one journeying to some holy place, and singing as he goes:—

"Ethereal minstrel, pilgrim of the sky."

And James Montgomery says to it-

"Bird of the happy heavenward song,
Could but the poet act thy part,
His soul upborne on wings as strong
As thought can give, from earth might start;
And he with far diviner art
Than genius ever can supply,
As though the ear might glad the heart,
And bring down music from the sky."

Reminding one of the simile of Jeremy Taylor, a delightful old English writer, who says of this Lark, that "it soared and sung as it had learnt music and motion of an Angel." But with matter like this we could fill pages on pages, for no bird except the Nightingale has ever been such a favourite with the poets as the "Lyric Lark" which Shakespeare heard "singing at heaven's gate," and which Shelly said must be a spirit and not a bird at all.—

"Hail to thee, blythe spirit,
Bird thou never wert;
That from heliven or near it,
Pourest thy full heart
In profuse streams of unpremeditated art."

We should like to find room for the beautiful lyric from which this and another stanza have been taken, and for many more delightful Lark poems; but this cannot be, so we will descend to sober prose, and tell how this chief of the British Alaudine birds, is found all over Britain, but not in Ireland; nearly all over the Continent of Europe, indeed even in the coldest parts, although it does not remain the year through, but migrates to Greece, and Italy, and other southern countries, on the approach of winter.

In some parts of Italy, the coming of the Larks on their annual southern migrations is eagerly looked for, pieces of glass and other glittering objects are exhibited to attract them, and they are snared and shot in great numbers. In this country, in winter, when they congregate in flocks, Lark shooting is a favourite amusement; there is no doubt that Lark pie is very nice, and half a dozen of the birds roasted might tempt an invalid to eat; but after all they are very unsubstantial fare, and had better be left to sing and enjoy themselves as best they can. Even in mid winter they may sometimes be heard caroling away like a contented and pious spirit in adversity; and very early in spring, as soon as a gleam of sunshine breaks out, up goes the Lark, with its song of thanks. Have our readers ever noticed what a spiral kind of ascent the bird makes, especially in windy weather, when it has to struggle against the current of air; it goes up cork-screw fashion, with frequent "libration and weighing of its wing," as Jeremy Taylor describes it.

The American author, Washington Irving, says, "Of all birds I should like to be a Lark. He revels in the brightest time of the day, in the happiest season of the year, among fresh meadows and opening flowers; and when he has sated himself with the sweetness of earth, he wings his flight up to heaven, as if he would drink in the melody of the morning stars. Hark to that note! How it comes thrilling down upon the ear! What a strain of music, note falling over note in delicious cadence. Who would trouble his head about operas and concerts when he could walk in the fields and hear such music for nothing? There are homilies in nature's works worth all the wisdom of the schools, if one could but read them rightly; and one of the most pleasant lessons I ever received in a time of trouble was from hearing the note of a Lark."

The influence which the song of this bird has on the mind of the listener, how it calls up recollections of early days, of the scenes, and friends, and simple pleasures of youth, is beautifully illustrated in that true story of the Lark that was taken to Australia, where there are no singing birds, be it remembered, and hung in its cage outside the store, to which the gold-diggers and other rough men resorted for the supply of their wants; and as soon as it began to sing, the rude laugh was stopped, and the oath left half uttered, and a listening silence fell upon all about, while tears were seen stealing down rugged, sunbrowned cheeks, and heads were bowed as if in unwonted prayer. As soon as it was known that an English Sky Lark was to be heard at that spot, people came from far and near to listen to it, and the little feathered preacher uttered a sermon that touched hearts so hardened with crime and indulgence of all bad passions that it seemed nothing would ever make them feel again. But feel they did; they called the Lark their parson, and they came again and again to listen to his

wonderful preaching, and they offered any amount of money for the preacher, whose owner would not part with him for all the gold that was ever dug at Ballarat, or any of the richest diggings in that new El Dorado.

Wealth could not buy the bonny bird,
For memories of the dear old home
In its sweet song were seen and heard;
However far the feet might roam,
This birdie's song could bring them back.
To tread again youth's very track.

Such honour then has this little songster, one of the very commonest of our common birds, known to everybody, beloved by all; it places such trust in man, that it builds its nest under his very feet, always on the ground, in a ridge or hollow, with the slender grasses all about it, and the blue sky in which it loves to sing, bending over. During the spring and summer months, and also late into the autuun, the music of not one Lark only, but many Larks, may generally be heard in the Chatham Cemetery, situated on a hill commanding a beautiful view of the Medway and surrounding country. One after the other the little birds keep ascending and descending, pouring out their joyous strains, as if endeavouring to cheer the mourners, and point out that their thoughts should take a heavenward flight; very sweet and comforting is this music to the heart of one bereaved, at least we have found it so, and were glad to find that the many Larks which made their nests amid the long grass inside the cemetery walls were cared for and protected from injury. Within the nest, if one had looked, when the hen bird was absent for a short time, he would have seen four or five eggs of a dark purplish brown colour, with indistinct markings of a darker hue. If it is much later than the end of May, the like number of tiny nestlings may be seen, opening their little yellow bills for the food which their parents will soon bring them. The time necessary for incubation, that is, sitting on the eggs before they are hatched, is about a fortnight; there are commonly two broads in the year. The young do not quit the nest until fully fledged, and then generally come home to sleep for awhile. Like all ground-builders, they often fall a prey to prowling weasels, polecats, and such like "varmin," as the gamekeepers call them, and even the sleek water-rat, if the nest be anywhere near its haunts, will sometimes make a meal of young Larks, and old ones too, if he can catch them sleeping.

Although placed on the ground, the nest of the Sky Lark is not very easily discovered, being hidden in a clump of thick grass, close beneath the roots of a bush, or amid the thick corn-stalks, where it

is perhaps safer than anywhere from human depredators, for until the corn is cut Farmer Giles looks pretty sharp after trespassers on that ground. Very frequently we have seen one of these birds go down straight as a stone, and felt sure that we could put our hand upon him, and the sitting mate, for whom he had been pouring out that ecstatic song aloft; but on going to the spot, no Lark was to be seen, nor nest either. Where could it be? perhaps several yards off, or close at hand on the other side of a ridge, or at the bottom of a gorse bush, amid a tangled mesh of grass, or a fine growth of stinging nettles or prickly thistles. It is often a wonder how these nests escape being trodden on by grazing cows, and sheep, and horses, and people who wander from the paths, as we all love to do, among the sweet fresh grass, bright with buttercups and daisies, "Nature's gold and silver." Doubtless this sometimes does occur, but not often, we believe. Now and then a deserted nest will be found with the eggs addled; in this case the hen bird has been destroyed, or offended by intrusion upon her privacy, the first time she was disturbed she crept away so slily and carefully, that not a blade of the tall grass amid which she hid herself was seen to move; the second time there was a little flutter of indignation, and her course could plainly be traced as she went to seek her mate who was not far off; but the third time, she spread her wings and went up at once with a complaining cry that seemed to say-"I can stand this no longer, take the eggs if you want them, nest and all, for I shan't use it any more;" and she never came back again, but sought out a spot more free from intrusion, but it was a bad selection for her, that field of grass laid down for hay, for being late in the season, the cutting took place before her young ones were ready, and, not liking to leave them in danger, she sat still to cover them, and had her head taken off by the scythe. This has several times happened both in hay and corn fields; and an instance is recorded of a hen bird moving her eggs one by one to a safer spot, when she saw the mowers working their way towards her nesting-place. Jesse, as a result of his own observation, reports this to be a fact, and says, "that the peculiarly long hind-claw of the Lark enables the bird to grasp and convey its eggs from place to place without much difficulty."

Here we have the feeling of maternal affection in a bird very strongly displayed, and also a reasoning faculty. Although there are many instances of the female Sky Lark deserting her nest when disturbed, yet she has never been known to do this when the young were hatched and incapable of feeding themselves; she would give her life for them, but would not voluntarily desert them. We ought not to

leave this part of our subject, without quoting the description given by Graham, in his poem "The Birds of Scotland," of the Lark's nest:—

"On tree or bush no Lark is ever seen;
The daisied lea he loves, where tufts of grass
Luxuriant crown the ridge; there with his mate
He forms their lowly home of withered bents,
And coarsest spear-grass; next the inner work
With finer and still finer fibres lays,
Rounding it enrious with his speekled breast.
How strange this untaught art! It is the gift,
The gift innate of Him, without whose will
Not e'en a Sparrow falleth to the ground."

Bishop Mant, in his "British Months," describes the distress of a parent bird when driven from her nest:—

"Round from her humble pallet mark, Up starts, alarmed, the brooding Lark, And round and round her dwelling flies, With fluttering wings and plaintive cries."

With the appearance of the Sky Lark on the wing most people are familiar, but on the ground, or on a tree, it seldom gives the opportunity for close observation, being, during the breeding-season especially, a shy, hiding bird. But in the winter, when it becomes gregarious, and often driven by hunger, approaches very near to the farm-house, or other human habitation, it can be better identified, although its plumage is not then so distinctly marked as earlier in the year. The male bird is generally a trifle over seven inches long; the colour on the upper parts is a light reddish brown, as is the fore part of the neck, which is covered with brownish black spots; the sides are a mixture of brown and white, in somewhat obscure streaks, and the under parts are dull white; there is a brownish white band over the eyes, and on the head a crest of silky brown feathers, which when erected give the bird a pert, foppish appearance, which is increased by its standing well up on its longish legs, and seeming to look at objects with a supercilions kind of air. He seems to say, "Here am I, the finest singer in all creation, and of all small birds, look you! the loftiest soarer; why everybody watches my flight, until I am lost in the golden glory of the sunshine, and everybody listens to my song. All the poets praise me. Hark, you shall hear!" Then up he springs, and is soon caroling aloft, in quite a wonderful manner. What a shame it is to cage such a songster, and as to putting him in a pie, and eating him, the very thought is suggestive of music on the stomach, which must be very unpleasant; and yet people do both shut up the Sky Lark and eat him. We have not unfrequently heard one singing in the streets in his circular fronted cage, on the bit of withered turf, and what a mockery of merriment it has seemed to us. He sang simply because he must sing; but oh, how much more joyous he would have been beneath the open canopy of heaven, blown about by every breeze, free to go and come at pleasure.

Buffon relates a singular instance of maternal care manifested by a young hen bird of this species. She was brought to him in the month of May, and was then not able to feed without assistance. She was hardly fledged, when the naturalist received a nest of three or four unfledged Larks, to which she took a strong liking, tending them day and night, cherished them under her wings, and fed them with her bill, although they were scarcely younger than herself. Her tender care of them was unceasing. If they were taken from her, she flew to them as soon as permitted to do so, and would not attempt to effect her escape when opportunities were offered. Her affection grew upon her so that she neglected food and drink, and at length expired, consumed, as it seemed, by maternal anxiety. So essential were her cares, that none of the young birds long survived her.

The Sky Lark is one of the most easy birds to snare; because directly he is startled by the net coming over, he rises perpendicularly, his instinct being to soar; other birds will fly off obliquely or horizontally, before the net is close to the ground, and so escape, but he is a "scorner of the earth," and like that

"Vaulting ambition that o'erleaps itself,"

often pays dearly for its attempts to rise.

The food of this Lark during the summer is almost entirely insectivorous, caterpillars and worms forming the chief of its daily fare. The bird is said to stamp with its feet on the ground, near worm casts, and when the slimy wriggler, alarmed by the concussion, puts up its head, it is immediately seized by its watchful foe, and drawn out to be devoured. It is only in the winter, when insect food cannot be obtained, that this bird becomes a plunderer of the stack-yard, and takes a very small payment for the benefit he has rendered to the cultivator. At this time of year it is that Larks gather into flocks, congregating occasionally in incredible numbers; thus in 1856, we read in the "Doncaster Gazette," that an extraordinary sight was witnessed in the fields attached to the Newton Farms, near Doncaster. The

largest flock of Larks that can be ever remembered visited them. They covered six acres of ground, and amounted to thousands. They were rather shy, and when disturbed their flight darkened the air.

A still more amazing flight of Larks was seen by a newspaper correspondent, who relates that as he was walking in the Regent's Park, the time of day being one p.m., he observed an immense flock of these birds coming over the Zoological Gardens; their numbers were countless, and they literally darkened the air; they were flying so low that the flock had to divide in order to pass the observer. They took two or three minutes in going over, and shortly after this flock had passed, there came another almost as numerous; and so it continued for the space of an hour, flock succeeding flock, at short intervals, like divisions of a great army, all coming from, and going in, the same direction; sometimes it was a detachment of a few hundreds, and then as many thousands. One of these flocks settled on the ground not far from the observer, covering half an acre, and standing within a few inches of each other. The park-keeper and others witnessed this extraordinary sight. How long the flight had been going on before it was observed, and how long it continued after he left, cannot be told. Here was evidently a migration on a large scale, from one part of the country to another, most likely in search of food.

THE CRESTED LARK,

(Alauda cristata.)

PLATE IV, -FIGURE V.

This species is very rare as a British Bird, only two specimens having come under the observation of collectors in this country, of these one was shot near Tansy, in Ireland, the other in Sussex; the above scientific name was given to it by Gould, who has a figure of it in his "Birds of Europe." Yarrell describes it in the supplement to his "History," and Macgillivray in the appendix to his "Manual." Morris says, "It seems to be doubtful whether the older writers knew it at all." It may prebably have been seen and mistaken for the Sky Lark, which it closely resembles, being only a little smaller, having a somewhat stouter bill, and a more decidedly projecting crest. It appears

to be a not uncommon bird in almost every part of the continent, extending as far northward as Siberia, and to be known in Asia Minor, as well as in Egypt, and other of the northern parts of Africa.

It migrates south and north according to the seasons, and lives upon insects, worms, and occasionally grain. It builds its nest upon the ground loosely, like the Sky Lark, and generally sits upon four or five eggs of a light grey colour, spotted with brown of different shades.

Its song, which is continued till the month of September, is sweet and agreeable, but has little power. This bird is not so entirely a ground builder as most Larks, its nest having been found in Germany on clay walls and thatched roofs, but it is nearly always in more lowly situations. The bird frequents chiefly thickets and bushes on or near cultivated ground, wood paths, and the neighbourhood of retired villages; insects, small seeds of various kinds, and sometimes grain, constitute its principal food in a wild state.













LARKs, $2. \ \ \, \text{w.mbtbe} \, 1. \ \ \, \text{Sinc} \, = \, 2. \ \ \, \text{w.mbtbe} \, 1. \\ 4. \ \ \, \text{Sk} \, \, , \qquad 5. \ \, \text{Cree} \, \, \text{c.}$



LARKS IN CONFINEMENT.

Among the birds which may be taken and tamed when old, Bechstein gives the Sky Lark, of whose song he says that it is exceedingly agreeable, with which verdict most who have heard it will agree, although Neville Wood says that it is harsh and unmusical; he is, however, decidedly in a minority. No doubt it very much depends upon the frame of mind in which it is heard, the time, the circumstances, and the scenery. The German naturalist tells us that this strain consists of several passages, all of which may be characterized as trills and shakes on various notes of the scale, and only occasionally interrupted by the repetition of a loud whistle. It is a docile bird, and even when old will often imitate the songs of its fellow-prisoners. It may have the range of the room or aviary, or be shut up in a cage, which should not be less than eighteen inches long by nine broad, and fifteen deep, on the floor should be a box filled with silver-sand in which the bird delights to dust its feathers. The top of the cage should be lined with cloth that the bird may not hurt itself when it obeys the strong instinct to soar as high as it can. Food and water vessels should be fixed to the side of the cage, or placed in a box inside, so that they cannot well be turned over.

The time for taking young Larks out of the nest is when the tail is about three-quarters of an inch long: they may be fed upon bread soaked in milk with some poppy seeds, ants' eggs should be given if they can be procured; the musical instruction of the birds should commence before they are fully fledged, if it is desirable for them to whistle and pipe other than their own wild notes: they have good imitative powers, and soon acquire the song of the Chaffinch, Nightingale, or other bird near which they may be placed.

Larks will live in confinement as long as six or eight years, if well cared for and fed regularly, on poppy, crushed hemp seed, and bread crumbs, occasionally varied with oats, barley greats, and malt, with now and then some green stuff such as water-cress, lettuce, cabbage, etc.; lean meat cooked and shredded fine, ants' eggs, and small worms, they take with avidity, and a little food of this kind is no doubt beneficial to them.

The Wood Lark, and Crested Lark, are both attractive cage birds, the former especially, on account of its vocal powers, but it is a more delicate bird than either of the others, and requires a more frequent change of diet; to the list given above may be added for this bird, sweet curds, and bullock's heart boiled and grated fine; the universal paste may be given, as to all Larks, to this species, which seldom lives more than four years in confinement, and very commonly dies of a broken leg; it is peculiarly subject to a disease which causes the claws to drop off; the best preventive measures are strict attention to cleanliness, in the feet especially, and the careful removal of any hairs which may cut into the flesh and cause it to fester. Parasitic insects are very troublesome to Larks, some of which literally swarm with them; a lotion made with white precipitate powder, about three grains to the ounce of water, applied under the feathers, may be used, syringe the infected parts with a weak infusion of tobacco. All Larks are great dusters, and should have plenty of nice clean sand provided for this purpose.

A female Lark in confinement has been known to lay as many as twenty eggs in the year, when no male bird was present, but she could not be got to sit on them, although these birds will often breed and rear their young when deprived of liberty; an instance of this occurred at Chatham a few years since, in a pair of the birds, in the possession of an artilleryman at the Spur battery; the female of course took the principal duty, and the male attended on her most assiduously, cheering and entertaining her with the melody of his song.

THE ACCENTORS, RED AND BLUE BREASTS, RED AND BLACK STARTS.

E have here a group of birds, which approach very near to the family Sylvinæ—Sylvine birds or warblers, on one hand, and to the Saxicolinæ—Saxicoline birds, or chats, on the other; indeed to the latter family Macgillivray, and some others consider them to belong. In their general habits and characteristics they are pretty much alike, although they differ considerably in appearance; they are all songsters, but not very loud or intrusive ones, and ali insect eaters, chiefly being what are called soft-billed birds, that is, with bills unfitted for crushing any hard substances, such as grain, the larger kind of seeds, which they do sometimes eat, although of vegetable food they prefer berries.

The two Accentors or Chanters, are the only British representatives of a genus of the Saxicoline family, and they, like all the rest of the group, are nearly allied to the Thrushes, which are great fruit as well as seed and insect feeders.

Prominent in the group, is a bird that will at once be recognized as the cheeriest, sprightliest, pertest, and most pugnacious, yet withal the most familiar and best beloved of all our feathered friends—Robin Redbreast, of whom we shall have much to say presently; he stands alone to represent the genus *Erithacus*, and his three

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relatives, the Bluebreast, the Redstart, and the Blackstart, are in another genus called *Ruticilla*; but they all, as we said before, belong to the same Sylvine family, and if not exactly brothers and sisters, they are uncles and aunts, and cousins.

Mostly slender as well as soft-billed birds, small of size, with but little variation in the colours of their plumage, the most conspicuous in this respect being Master Robinet, with his scarlet breast; this insufferable little coxcomb, and yet dear, delightful, winter visitant, that we would not be without for the world. Miss Bluebreast, too, has a prettily variegated attire, and the dash or flush here and there of orange in the dress of the Redstart, lights up the grey tints wonderfully; and the Blackstart's fiery tail, gives him certainly a distinguished appearance. But then, they are all beautiful, the plainest birds cannot help being that, and better is the sweet song of our native birds, than all the gorgeous plumage with which God has seen fit to deck many of the screamers and chatterers of foreign clumes.



ACCENTORS, ETC.

1. Alpine Accentor.

2. Hedge Accent r. 3. Redbreast. 4. Eluebreast.

5. Redstart. 6. Blackstart.



THE ALPINE ACCENTOR,

(Accentor alpinus.)

PLATE V .- FIGURE I.

The first of these scientific names comes from the Latin root, canto, to sing, the meaning of the second is plain enough, of or belonging to hills or mountains. The bird frequents the highest parts of the Alpine districts of Italy, France, Spain, Germany, and Switzerland, during the summer, although in winter it seeks and finds a warmer temperature in the sheltered valleys. It has also a place among the native birds of Asia, being found in Japan. Although shy and retired in the warm season, yet in times of cold and scarcity of food it approaches the farm yards, villages, and country houses, and becomes like the Redbreast, although not so commonly, a sharer of man's bounty. At such seasons it is not very particular as to its diet, but when with enough and to spare, it can pick and choose, it likes little else than insects and the smallest and softest of seeds.

The male bird has a length of from six and a half to seven inches, a strong, straight, and finely pointed bill, the upper part of which is rusty black, fading off into yellowish white at the base, and this latter, with an orange tinge, is the colour of the lower part, except at the tip, which is brownish black. A light brownish grey is the colour of the head, crown, and neck, sides, and back; lightish grey, with a brown tinge, extends over the sides of the neck, while the front or breast, is a dull yellowish white, with a small black spot on each feather, which gives it a mottled appearance. The chin and throat are dull white, and the feathers here have a crescent-shaped spot on each, which is more or less distinct according to the season.

This bird, which is sometimes called the "Alpine Warbler," or the Collared Stare or Starling, is a rare species in England, five specimens only are recorded as having been seen in the country. The first of these was a female, taken in the gardens of King's College, Cambridge, in November, 1822; another, supposed to be the male was

seen at the same time, the pair frequenting the grass plots of the college, and climbing about its buttresses, in the tame and confiding manner which is characteristic of the bird. The other three specimens were found in Somerset, Suffolk, and Devonshire.

The nest of this bird, which is made of moss and fine grass, lined with wool or hair, is generally built in some lonely place, in a rocky cavity or erevice, and sometimes under the shelter of a low bush, such as the Alpine rose, and has been found in the roof of a lonely house, but not often. The eggs are four or five in number, of a beantiful light blue colour, and unspotted, like those of the species next to be described, only somewhat larger; the bird is said to produce two broods in the year. Seldom is this pretty Chanter seen in the branches of trees, but generally either on the ground or slight rocky elevations, where it will stand and shuffle its wings in a manner peculiar to the members of its genus, attering its ordinary note tree, tree, or breaking into a low sweet warble. Insects, such as flies, grasshoppers, carwigs, ants, &c., are its ordinary food, with small seeds now and then for a change.

THE HEDGE ACCENTOR,

(Accentor modularis.,

PLATE V .- FIGURE 11.

Sometimes called the Hedge Sparrow, or Dunnock; also known as the Hedge Warbler, Shuffle-wing, and Winter Fauvette. A singing bird, as the scientific name indicates, with a sweetly modulated song; retiring in its habits, without being particularly shy, gentle in its motions and manners, not fussy and fantastic as some birds are, but with a sort of subdued cheerfulness about it, like that arising from a contented spirit, with a neat, yet pretty dress of grey and brown, the latter flushing into red at places, and the former deepening into blue, as in the head, nape, throat, and breast. It builds its deep, well-rounded, and finished nest of small twigs and grass, then, on the inner side, moss, and on that some softer substance, such as wool or lair, in hedges or low bushes, or in holes of walls, stacks of wood, or amid

the twisted ivy-boughs, seldom many feet from the ground, and here it lays its five or six beautiful light blue eggs, which are so often taken by nest-robbers, not with any intelligent desire to study oologythat is, the science of eggs-or to arrange them in a cabinet, but because they look pretty strung upon a string with others, and show, as the owner thinks, what a clever fellow he was to find and take them. It is a melancholy spectacle, these strings of grey, and brown, and white, and blue, speckled and spotted, or plain little spheres, rows and rows of them, many of one sort, and one wonders where the pleasure can be of exhibiting such a collection, only the gratification of a childish vanity, or a greed for possessing, which may afterwards develope into avarice. A pair or two of each kind, arranged in a cabinet, and properly labelled, is a pretty and a pleasing sight; it shows that the collector is a student of nature, who is cultivating at the same time his love of God's creatures and his powers of observation. Sufficient eggs for such a purpose, as well as a few supplementary ones, to exchange with other young naturalists, may always be obtained without eruelty or distress to the parent birds, who will not miss one or two taken from the nest. They are generally idle and truant boys, who make these large and unmeaning collections of eggs, which they ought to be ashamed to look upon, and no bird suffers more from their depredations than our pretty little Hedge Sparrow, whose nest is within easy reach of their mischievons fingers. Besides this affliction, the Dunnock has not unfrequently thrust upon it an expensive lodger, in the shape of a young Cuckoo. Of course our readers all know that this strange, wandering bird, whose double note they have often heard in the summer woods, sounding like a far-away echo, makes no nest of its own, but just goes quietly and drops one egg here and another there into that of another bird, which by and bye hatches a monster, almost as big as herself, that takes more food than all the rest of her brood, and sometimes even with its broad back shovels them over the edge of their rightful home, so that they are killed by the fall or die of starvation, while the intruder gets fat upon all the produce which the old birds collect for the sustenance of their family; he grows and grows till he fills the whole nest, and some say even bites off the heads of his foster parents, but we do not quite believe this, notwithstanding that the fool in Shakespeare's play of King Lear says

> "The Hedge Sparrow fed the Cuckoo so long, That she had her head bit off by her young,"

meaning this ravenous monster of which she was involuntarily made the mother and nurse. It appears that more young Cuckoos are hatched

and fed by Hedge Sparrows than by any other kind of birds, and that they are among the earliest of builders, the nest being generally finished early in March; a month before the male may be heard singing his short and plaintive song which has little variety in it, but it is very sweet in tune; it is continued with but little intermission, throughout the greater part of the year. When silent in autumn, the birds are undergoing their annual moult; then it is that many of their old feathers are shed, and new ones begin to grow. If you see a Dunnock flitting about the hedge or the copse, you may be pretty sure its mate is not far off, for these birds mostly go in pairs, even although it may not be in the breedingseason. But how are you to know it is a Dunnock? Well, it is a bird rather more than five inches and a half long, with a pretty full plump body, and a longish tail; it has a shortish, pointed, dark brown beak. lighter in colour at the base; the head, nape, and sides of the neck, are grey, striped with brown everywhere except behind and below the ear coverts, where the grey is nearly pure; the back and wings are reddish brown, with darker streaks; the wings and tail are also brown of various shades; and the chin, throat, and chest, grey; the sides are pale brown, streaked with dark brown; the lower part of the breast, and body, are white, with a reddish brown tinge; and the legs and toes are orange brown, with black claws, the hinder one of which is as long again as the other three. There you have Master Shufflewing drawn from life, as he is in the picture.

All over England, you will find him, as much in the north as in the south, for he seems to care very little about the cold. And all through the year you will find him, for he does not fly away frem us at the approach of winter, as many sweet songsters do; frequenting hedgerows, pastures, gardens, and cultivated fields, where he finds his natural food, insects, and seeds; he is no fruit eater, and therefore not so much at enmity with the gardener as some birds are. And all through Europe you will find him, from Italy on the south, to Sweden in the north; he has been taken in Smyrna, in December, but is a rare bird there. A celebrated American ornithologist characterises this as a beautiful little bird; and Maegillivray speaks of it as "familiar, gentle, and modest." White, buff, and cream-coloured varieties of this bird have been met with, and some with mottled plumage, consisting of a mixture of two or more of these colours.

THE REDBREAST,

(Sylvia rubecula)

PLATE V .- FIGURE III.

A RED bird of the wood, is the meaning of the scientific name, which naturalists have given to our old friend Robin, Robinet, or Ruddock, whichever it pleases one to call him; he is the prime favourite of our childhood; the hero of nursery song and story; the lover of Jenny Wren, who was killed by that wicked Sparrow, with his bow and arrow; at whose death, "All the birds of the air fell to sighing and sobbing," but although he was dead, and of his burial there is a very circumstantial account given, yet he is alive still, and has been at any time through the past centuries; he covered the children in the wood with leaves, when they laid them down to die of hunger and fatigue, and sang a dirge over them; and from the very beginning to the end of every year, may his sweet warble be heard in the leafy woods during the summer weather; in the cold, and bleak, and bare season, close about our habitations, into which he comes with a trusting confidence which insures his safety and welcome, to feed and be thankful.

> Thankful for his dole of crumbs, In the winter Robin comes, Pays us with a warble sweet For the food he has to eat.

We could fill this volume with extracts from the prose and poetical writers who have written about the Robin; but this would never do, for we have many other feathered clients who claim a place here, and we must be just to them; so to "the household bird with the red stomacher" we shall only give his due share of notice, and of the songs which have been sung in his honour, shall but quote a few snatches here and there-

"Art thou the bird whom man loves best, The pious bird with the scarlet breast, Our little English Robin;
The bird that comes about our doors
When autumn winds are sobbing?
Art thou the Peter of Norway boors?
Their Thomas in Finland,
And Russia far inland?
The bird who by some name or other
All men who know thee call thee brother."

We give this short extract from the poet Wordsworth, because it alludes to some of the names of endearment by which this bird is known in foreign countries; thus in Sweden he is called *Tommi Lidin*, in Norway *Peter Bonsmed*, in Germany *Thomas Guidet*. In England we sometimes call him *Bob*, we are on such very familiar terms with him, and they know and love him almost if not quite as well in nearly all parts of Europe, in the colder countries of which he is a summer visitant only. He has been found in the northern parts of Africa, and also in Asia Minor, and Persia. His presence in the western hemisphere has not been recorded, the bird known as the Robin in America is

"Robinet with ruddy breast,
Best known of all and loved the best."

quite a different species from

A very bold bird is the Robin, exceedingly pugnacious, ready to stand up for his rights, and fight to the death with a rival for the affections of his mate, or a chosen nesting-place; terrible battles often ensue between two of the males, and sometimes one is killed thus by his own kith and kin. This readiness to quarrel and fight is the great stain upon his character, and perhaps it may be the reason why he is dressed, like a soldier, in red. Need we describe his plumage? nay, every child is familiar with his appearance, from the tip of his short pointed beak, to the end of his broadish, olive-brown, not over-long tail, and down to his longish slender legs and toes of ashy brown.

Stories about Robins are as plentiful, as, we were going to say, "leaves in Valambrow," but perhaps our younger readers would hardly know what that meant, so we will say, as blackberries in a fruitful autumn; several are cited by Mr. Morris, in his very interesting volume entitled "Anecdotes in Natural History." Here is one of them taken from "The Newcastle Courant."—A granite-hewer, while at work in Dalbeattie heard what seemed to be a bird's cry of distress, and going to the spot from whence it proceeded, found a Robin in a state of great agitation. A large adder had made its way up the face of the quarry, and had just got its head over the edge of a nest built among

the brushwood, and containing the unfledged offspring of the poor Robin, who was defending them against the enemy as well as she could; rising above it in the air, and then coming down with a swoop, and endeavouring to drive her bill into its head. The man immediately dislodged the adder, and while he was killing it, the Robin perched upon his arm, and testified her joy and gratitude by unmistakable signs. Then, when she had pecked awhile at the lifeless trunk of her enemy, and ascertained that all was safe in her nest, she settled upon the branch of a neighbouring tree and piped out a song of triumph.

Some of our readers have no doubt heard of the small dog, which being attacked and beaten by a larger one, formed an alliance with one yet larger than his enemy, and bringing this new ally to the scene of his disaster, had the satisfaction of seeing summary punishment inflicted on the offender. This is what a Robin did under the like provocation. Our red-breasted friend had been regularly fed at a certain house to which he came in the winter, and one day seeing a sparrow there also partaking of the dole, he attacked the intruder with great tury, and drove it away. But the defeated sparrow called some relatives to help him, and coming again, drove the Robin from the crumb-strewed board, and the sparrows feasted away rejoicingly. However, they did not long remain in possession of the field, for the next day back came Robinet, with a dusky crow, whose beak was too formidable for a sparrow to come near. So this strangely-assorted pair kept the supplies as long as they needed them.

Woe be to the intruder on Master Bobby's favourite places of resort, especially if they are feeding grounds. Desirous of witnessing an exhibition of the bird's pugnacity, a gentleman once placed a stuffed Robin by a window, to which a live pensioner of the same species used to come, just within the glass, against which the living bird flew with great vehemence and with fell intent; here he could not do much, but when the bird effigy was placed ontside, at it went the live Robin, pecking at its eyes, and plucking out its feathers, in a most savage manner.

The Robin is exceedingly attached to its mate, with which very probably it is paired until the death of one takes place. Λ female of this species, which was caught and caged in November, was for several weeks constantly attended by the male, which retired from the cage very unwillingly when any one approached it, uttering complaining cries if excluded from the room in which the cage was hung. Of Robin's boldness and familiarity when driven by inclement weather and scarcity of food, to seek the protection of man, instances out of number might be quoted. There was one which quartered itself in

the sitting-room of a shoemaker in the village of Bishop's Cleeve, Gloucestershire. It settled itself behind a teapot on the mantle-piece, and there built a nest, and laid eggs, on which it sat, taking no notice either of the family in which it had become domesticated, or of strangers who came to look at the strange sight; it even allowed itself to be touched and caressed, and when the meals were on the table, came fearlessly down for its share, and even seemed to recognize the several members of the family.

There was another, that year after year, came and made itself a home in a large house, in which many persons resided; into kitchen and drawing-room, study and bed-room, went the impertinent bird, now snatching a morsel of meat from the hand of cook, now from the shoulder of the mistress flying on to the breakfast or dinner table, and picking up such scraps as pleased its fancy; this was a tailless bird, and therefore easily recognized as the same annual visitor; it preferred to sleep in an outhouse, and regularly tapped for the window to be opened when bed-time came, and to be let in again in the morning. If turned out of a room for some misconduct, or because it was not convenient to have him there, Robin would fly in at any opening he could find, and be back again almost before the window was closed, from which he had been expelled. If taken a distance of several miles, and let loose, he was sure to be back again in a very short space of time. There is little doubt that this shared the fate of so many feathered pets—fell a victim to the cat!

The pugnacity of the Robin is sometimes turned to account in effecting the capture of others of its species; if one of them be fastened in a cage, the door of which is left open, it will not be long before another is attracted by its cries and fluttering, and entering the cage, will at once engage in a furious fight with the captive, during which it can be easily secured. Indeed it is not even necessary to use a cage for this purpose; the decoy bird may be tied by the leg to any object, and so intent are the combatants in their murderous work, that they do not heed the approach of any person, and may be taken with the hand. Better, however, to leave the poor bird at liberty; plenty of opportunities will be afforded of hearing him warble his sweet and somewhat melancholy song, and of enjoying the pleasure of his company; he is so familiar and confiding, and comes so often of his own accord to be fed and cherished, that it is a shame to abuse his confidence.

The nest of the Robin is formed for the most part of moss, leaves, and small twigs, lined with horse-hair or feathers; the eggs are from five to seven in number, of a dusky ash-colour, mottled with reddish brown spots; as a rule there is little variation in the colours, but specimens

have occurred of a nearly pure white, and also of a tawny red colour. This bird is a cautious builder, concealing its nest with great care, so that often the only way to discover it, is by watching the female as she flies back, after leaving it for awhile. The situation may be among the roots of a bush or tree, in a thick wood, or a hole in a wall, well covered with ivy, or amid the intertwining branches of that plant upon a rugged tree trunk; sometimes in the thatched roof of an outhouse, or in the thickest part of a low evergreen, or of a privet hedge in the garden. Some Robins are much wilder and shyer than others, and these generally build in the leafy woods, away from human habitations; those which frequent houses and gardens much, often display during the nesting-time, as they do in the winter, great fearlessness and confidence in man. Bishop Mant, in his descriptions of the British Months, alludes to some of these more exposed nesting-places:—

'The Robin Redbreast makes his bower For nestling in the vernal hour, In thatch, or root of aged tree, Moss-grown or arching cavity Of bank, or garden's refuse heap, Or where the broad-leaved tendrils ereep Of ivy, and an arbour spread, O'er trellised porch, or cottage shed. So, as we pass the homestead round, At every change of place, the sound Of Robin's voice salutes the car, Carolling to his partner near; And with sure gaze the observant eye May Robin's hidden home desery."

Very singular places have been sometimes chosen by these birds for their nests; thus, one pair built in a hole, caused by the passing of a shot, right through the foremast of Nelson's ship, the Victory; this was the mast, against which the hero was standing when he received his death-wound, and William the Fourth had part of it placed in a kind of temple in the grounds of Bushy Park, where he resided, and it was here that the Redbreasts made a family mansion of the circular hole so strangely made. While the Crystal Palace at Sydenham was in course of construction, several Robins settled themselves very close to the workmen, making their nests amid the large roots, which were brought on to make the embankment on the southern end. The din around them was perfectly deafening, and the bustle incessant, but there they sat and hatched and reared their young, without displaying any signs of fear.

One pair of these bold birds chose a child's covered cart, which hung

against the wall over the fire-place of a small cottage, in which potatoes were kept, and which closely adjoined a blacksmith's shop, where the roar of the forge fire, and the ring of the hammer on the anvil, were often heard. Numbers of visitors came to see the birds, but they took it all as a matter of course, and having raised a first brood, thought they would try a different position, so built another nest on a shelf on the opposite wall, close to a mousetrap. The second brood reared, feeling that they had not yet done enough for society, they set about building a third nest, on a buudle of papers which lay on another shelf, yet in the same room, and a correspondent of "The Field Naturalist's Magazine," saw the hen bird on the 21st. of June, feeding the four little fledgings which constituted this third brood, while a party of friends watched the proceedings, and the cock bird looked on from the outside of the building.

It has been remarked that the hen of this species sits very close, and is not easily disturbed; she has been taken up with nest, eggs, and all, and placed in a cage, where she has continued to sit and hatch her young. One which was so served died of starvation, rather than neglect her duties, the inference being that she depended upon the cock bird for a supply of food.

Another strange nesting-place chosen by the Redbreast was a candle-stick, on a mantlepiece over the kitchen fire-place, at the house of a surgeon at Stansted, in Essex; and yet another was on the reading-desk of North Molton Church, Devon, directly under the Bible and Prayer-book; this was a very devotional bird, and no doubt the country people looked upon it with some degree of reverence, as they commonly do upon all Robins; so it is said to be wicked to kill one of these birds, which are such special favourites with young people, in whose nursery ballads and legends they play so important parts. Several other instances have occurred of the Robins building in or about church pulpits, and they have been known to join in the songs of praise raised by the congregation.

The average length of the Robin is about five inches and three quarters, the hen being somewhat smaller; the wings expand to a little over nine inches; the young birds at first are covered with a loose down of greyish brown; they do not get the characteristic red colour on the breast until after the second moult, although a dull reddish or orange tinge gives promise of the glory that is to come. Varieties sometimes occur with the plumage nearly white or grey, or otherwise very different from the ordinary colours.

The Robin is not a high flier, and it goes only short distances at the time, from one nesting-place to another, with a quick and straight flight. On the ground it advances by a few hops, then pauses with a toss of the head, and a sidelong look, which is very peculiar; it feeds on fruit, seeds, and berries, those of the elder and blackthorn seeming to be especial favourites; it sometimes captures insects on the wing, but more commonly on the ground, or in the trees and shrubs.

A very soft, sweet, and plaintive song is that of the Robin, heard in winter time when few other sounds disturb the stillness of nature; it has a soothing effect upon the mind, esp cially when we see how familiar and confiding the little songster is, and how earnestly he pleads, with his winning ways and sweetly warbled notes, for shelter and protection.

Carrington, in his poem on Dartmoor, has some lines worth quoting on this subject:—

"Sweet bird of Autumn, silent is the song Of earth and sky, that in the summer hour Rang joyously, and thou alone art left Sole minstrel of the dull and sinking year. But trust me, Warbler, lovelier lay than this, Which now thou pourest to the chilling eve, The joy-inspiring Summer never knew. The very children love to hear thy tale, And talk of thee in many a legend wild, And bless thee for those touching notes of thine! Sweet household bird, that infancy and age Delight to cherish, thou dost well repay The frequent crumbs that generous hands bestow; Beguiling man with minstrelsy divine, And cheering his dark hours, and teaching him Through cold and gloom, Autumn and Winter, Hore."

Thomas Cooper, in his noble "Prison Rhyme," has some beautiful stanzas to the Robin, all of which, as they are probably new to our readers, we should like to quote, but for two of them only can we find room:—

"Hasten, dear Robin; for the aged dame
Calls thee to gather up the honeyed crumbs
She scatters at her door; and, at thy name,
The youngsters crowd to see their favourite come.
Fear not Grimalkin!—she doth sing 'three-thrum'
With happy half-shut eyes, upon the warm
Soft cushion on the corner chair: deaf, dumb,
And toothless, lies old Growler:—fear no harm,
Loved Robin!—thou shalt banquet bold without alarm.

If thou return not, Gammer o'er her pail Will sing in sorrow, 'neath the brindled cow, And Gaffer sigh over his nut brown ale; While evermore the petlings, with sad brow, Will look for thee upon the holly bough,
Where thou didst chirp thy signal note, ere on
The lowly grunsel thou did'st light, and show
With such sweet confidence, those darling ones!
Thy blithsome face,—and on thee all cried 'benison."

THE BLUEBREAST,

(Sylvia suecica.)

PLATE V .-- FIGURE IV.

These two scientific names signify a wood, and of Sweden, and therefore they tell us that this is a woodland bird, of a northern latitude. It is sometimes called the Blue-throated Warbler, Redstart, or Robin, its claim of admission to the British Fauna resting in about five specimens taken in different parts of the country. Kent lays claim to the only pair captured, they were shot on the eastern coast near the old towers of Reculvers, in September, 1842, and are now in the Margate Museum. Northumberland, Dorset, and Norfolk, claim the other three; Russia, as far north as Siberia, as well as Spain, France, Germany, and Holland, know this bird well as a summer visitor, and it seems strange that so few specimens have reached our islands, where its principal food, insects, earth-worms, and berries, is at certain seasons very abundant.

Its chief hannts are said to be low marshy grounds, the outskirts of forests, and margins of streams, when the weather is favourable; but in cold and backward seasons it goes into the more cultivated grounds, approaching dwellings and farms in search of food. Large flights of Bluebreasts migrate from one part of the Continent of Europe to the other, northwards in the spring, and southwards in the autumn; some probably pass over into Africa, where they have been seen. Our rare visitant is a pretty gentle bird, with a sweet song, which it utters from the top of a bush, with the tail expanded and vibrating; hence some have called it the Blue-throated Fantail, and thought that it ought to be classed with the Quaketails, a sub-family of the Wagtails. Sometimes the bird rises a considerable height above the brushwood, in which its nest is probably placed, and sings for awhile on the wing, then alights, it may be fifty or sixty yards from the spot whence it

rose. It begins its song early in the morning, and often continues it late in the evening, when most other birds have gone to rest; the slightest noise or stir near the spot will stay its music.

Mr. J. D. Hoy, a Suffolk naturalist, who has had opportunities of studying the habits of this bird on the Continent, says that it makes its appearance early in the spring, preceding the Nightingale ten or twelve days; in the breeding season it frequents low swampy grounds, on the woody borders of boggy heaths, and on the banks of streams that flow through moist meadows, where there is plenty of alder and willow underwood, near to or amid which the nest is generally placed on the ground among plants of the bog myrtle, or amid coarse grass; semetimes it is on the sides of sleping banks, well clothed with vegetation, or in the scraggy brushwood of moist bottems. The nest, which is closely hidden and difficult to discover, is composed of dead grass and moss, lined with finer grass; the eggs are from four to six in number, of an uniform greenish blue colour, a good deal like those of the Hedge Sparrow. The notes of the bird resemble those of the Whinehat, but they are more powerful; Bechstein compares the song to that of the Common Wagtail, with the addition of a deep humming sound, like the vibration of a string, with which it commences.

In appearance this bird presents many points of resemblance to both the Redstart and the Wagtail, forming as it were a link between the two; its usual length is about five inches and a half, of which the tail takes up two inches and a quarter: the sharp-pointed beak is blackish, with yellow corners, the iris is brown, the feet flesh-coloured, the claws dusky; the head, back, and wing coverts are brown, sprinkled with grey; a reddish white line passes over each eye; the cheeks are a rusty brown, bordered with dark grey; the threat and half way down the breast are dark azure blue, with a small white spet shining out of it, like a star, the brightness of which seems to increase when the bird is excited, as while singing; there is a blackish border around the blue, and an orange streak beyond this; the belly is dingy white, the shanks and sides reddish grey.

THE REDSTART,

(Sylvia phanicurus.)

PLATE V .-- FIGURE V.

Meaning a bird of the wood, with a purple or red tail. It is a lively and graceful species, whose motions it is always interesting to watch, as it goes in and out of the covert of leafy boughs and thick undergrowth, in which it most delights. Out it comes with a flutter and a start, flits or hops a little way, then dives in again, with a flash of the red tail that is quite startling.

The bird is said to be neither common nor uncommon, shy nor familiar; it is found in at least twelve of the English counties, as well as in Wales and Scotland, and although it dwells chiefly in thickets and woods, yet on account of its restless habits it does not remain hidden long at the time, and invites attention by its eccentric motions; shunning observation, it is yet constantly thrusting itself into notice; although it builds in the closest thickets, yet it is seldom far from some public path or high road. So our pretty Redstart, like many of those who claim to be reasonable beings, has a strangely contradictory character: let us describe his outward appearance. The male is in length generally a little over five inches and a half; in weight about three drachms and three quarters, that is, less than half an ounce; it has a black bill, edged with yellow; the sides of the head, and space about the bill, are black; the upper part of the forehead is white, and there is a streak of the same over each eve; the crown, upper part of the neck, and nape, are bluish grey with a tinge of light brown; the chin and throat are black; the breast a yellowish rust red on the upper part, fading off into a dingy white below; the back is grey on the top, rusty red on the sides; the wings are brown grey, and dull red prettily mingled; the long tail is brown and grey, brightening into orange beneath, hence the name Redstart, from the Saxon steort, a tail.

This bird, which is but a summer visitant with us, arriving about the middle of April, and departing in August or September, is distributed over the greater part of Europe, north as well as south; it is known

also in Asia Minor, Persia, and Japan. In our western counties it is not much seen, and is very rare in freland.

It builds a loosely constructed nest of moss, dry grass, and leaves, with a lining of feathers and hair, placing it frequently in a hole in an old wall, under the eaves of a house, in a hollow tree, or in the fork formed by the branches, or wherever sufficient support and shelter is offered; an old watering pot, flower pots, the ventilator of a stable, the narrow space between the upright iron on which a garden door was hung, the bottom of the nest resting on the hinge, and liable to be shaken every time the door was opened,—these are some of the strange places chosen by the Redstart for building.

The bird is said to manifest great attachment to one spot, coming back year after year to renew its labour of love; the female sits very closely, and will often suffer herself to be touched and handled, without quitting her nest, and both birds are most attentive to, and careful of, the young brood; on one occasion the male having been killed, another joined the female, and took the place of the deceased father. The eggs are unspotted, of a light greenish blue colour, generally from four to six in number, sometimes seven, or even eight. They are smaller and more delicate in shape than those of the Dunnock, which they resemble in colour. The song of this bird is soft, sweet, and melodious; it has been heard as early as three in the morning, and as late as ten at night; the cry of anger or alarm Macgillivray likens to the syllables oi-chit. All kinds of insects and worms, or caterpillars, and fruits and berries, are eaten by this species.

THE BLACKSTART,

(Sylvia tythus.)

PLATE V .- FIGURE VI.

THERE is some doubt as to the meaning of this generic term tythus, Morris gives it up, and no other naturalist, that we are aware, attempts to explain it. Latham calls the bird Sylvia Gibraltariensis, the Gibraltar Warbler; according to Maegillivray, it is the Blackbreasted Redstart, others name it the Black Redstart, the Black Redtail, and the Tythus Redstart. It is distinguished from the bird last

described, by the intense black colour of the breast and belly, where the other species is reddish brown; this deep tint fades off at the cheeks, chin, and part of the breast and sides, into a sooty grey, becoming lighter towards the tail, the larger feathers of which, like the rump, are a fine chesnut brown; the top of the head, neck, and back, are bluish grey; the beak, legs, toes, and claws are black. The whole length of the bird is about five inches and three quarters. It is slender and graceful in form, like most of the Warblers; its manners and habits are much like those of the Redstart, only that it seems to prefer stony and rocky places, elevated above the plains. It feeds on worms, insects in their various stages, the smaller fruits, Sometimes it builds near to human habitations, in and berries. which case in a hole in a wall, under the eaves of a house, or in a church steeple. But in the solitudes which it leves best, the nest must be sought for in the cleft of a rock, or hole in the side of a chalk pit, or a ruined wall; it is formed externally of grass and lined with hair. The eggs are five or six in number, of a pure glossy white colour, very delicate and fragile. Two broods are often reared in one year, the first being hatched about the beginning of May, and the second some time in June. The same nesting-place is often resorted to year after year.

The Blackstart has a light quick flight, rising and falling, and sporting in the air with much grace and elegance. On the ground it walks very erect, and has the same habit of oscillating its tail, as the other members of its family. Like the Dish-washers, or Wagtails, it has been observed to have that up and down, dipping motion of the body, especially when alarmed. It has a soft clear song of limited range; its ordinary call-note is likened by Meyer to the syllables "fid-fid! lack-lack!" It is an early and late singer, like the Bluethroat. Although many specimens have been taken in this country, this is with us a rare bird; it is rare also in Sweden and other northern parts of the European Continent; although it is rather common as a summer visitor in the south, it appears to inhabit the Morea, and has been seen on the bare rocky hills near Smyrna. One specimen was taken on board ship, five hundred miles from Portugal, and four hundred from Africa. Mr. Gould first described it as a British bird from a specimen taken near London, in October, 1829.



ACCENTORS, ETC.

- 1. Alpine Accentor. 2. Hedge Accenter. 3. Redbreast. 4. Bluebreast.
 - 5. Redstart. 6. Blackstart.



IN CONFINEMENT.

Our great authority on Cage Birds, (Bechstein), places the Alpine Warbler, or Accentor, in the list of those birds "tameable when old," but he gives us no particulars as to its treatment, knowing evidently very little about it; with its near relative the Hedge Accentor, or Dunnock, he is more familiar; he gives it the credit of being an agreeable addition to the aviary, on account of its liveliness, cheerful disposition, and pleasant song, but says that it has no pretension to the name of the Tree Nightingale, bestowed on it by some of his countrymen. It breeds in confinement, and the female will sometimes pair with the Redbreast. Strange to say, it is subject to the small-pox, and a cutaneous disease, which makes the eyes swell, the circle around them become bald, the beak grow scabby, and finally affects the feet and the whole of the body; notwithstanding the poor bird lives on, frequently for years in this sorry plight, much to the shame of its keeper. We should say, when the life of a bird, or any other creature kept by man, becomes a burden to it, a speedy death is the truest humanity. Master Bobby is such a familiar and domestic bird, we may be sure that he would do well in confinement, and be a great favourite; he sings well, better in a cage than in the aviary, and can be taught many pretty tricks, such as eating from the hand or the mouth, kissing, chirping at the word of command, &c. If sheltered and fed during the winter, and set at liberty in the spring, he will often come and ask for admission when the inelement season comes again. He is a great destroyer of flies, fleas, and other insect termenters. Diarrhea and decline are the only two diseases to which he is subject; for the former a lively spider or two should be given, for the latter ants' eggs and mealworms. Only mind, you must not turn two Cock Robins loose in the aviary together, if you do murder may be committed, and the victor, when once his blood is up, may attack some other fellow-lodger, and kill him or her too.

The Bluebreast, the Redstart, and the Blackstart are all very attractive aviary birds; sweet songsters every one, very tame and confiding, and beautiful in appearance. The German fanciers call the first the Italian

or East Indian Nightingale; they feed it, when newly caught, upon ants' eggs and mealworms, mixed with the universal paste, gradually withdrawing the insect food until they are brought to feed upon that alone; this is the course to be pursued with all the insectivorous birds, especially the Warblers. The Redstart and some others may be induced to take the paste by an admixture of elderberries; earthworms, however small they may be cut, seldom agree with such delicate birds in confinement; a great deal of motion is required to enable them to digest such strong food. They frequently die of atrophy, for want of power to assimilate even the milder kinds of nutriment generally given to them. The Blackstart, like its two relatives, may be allowed the free range of the aviary; if put into a cage, it should be a tolerably roomy one; they should be protected from draughts, and great attention to cleanliness is required. Few of the warblers will breed in confinement, neither of the three species now under notice have been known to do so. They sometimes live as long as eight years in confinement, but not generally more than five or six. They all delight in bathing, as much as the Redbreast, and should be supplied with fresh water daily when the weather is mild.

CHATS AND WARBLERS.

A LTHOUGH the whole of the birds we have now to describe are classed by some ornithologists in the family Sylviana, Macgillivray groups the Warblers only under that head, and places the Chats and the Wheatear in the Saxirolina, a distinct family, all the members of which bear a more or less decided resemblance to the last mentioned.

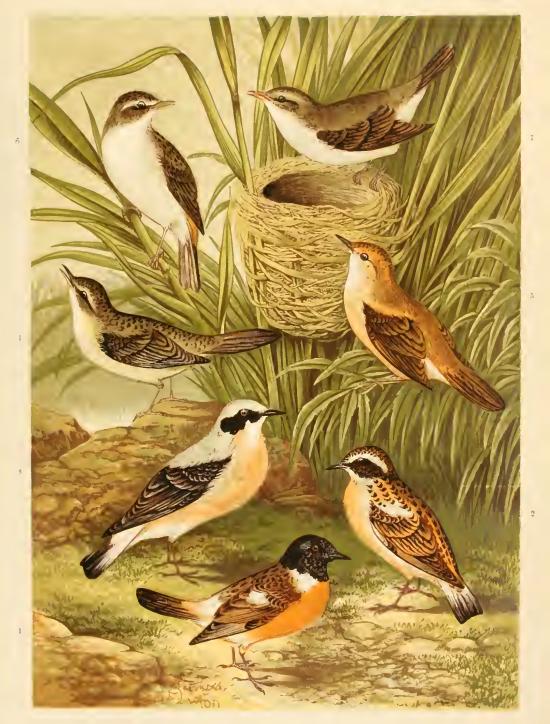
In general form the birds in this group are somewhat alike. They have slender bodies, with rather large and ovate heads; their bills are short, straight, slender, and tapering, and their wings of moderate length, with eighteen quill feathers; their tails, which are composed of twelve feathers, are also of moderate length. With the exception of the Stonechat, they are all migratory birds, generally departing in the month of October. They possess the power of emitting sweet and agreeable notes, and thus enliven the wild and desolate places in which they dwell.

The Stone and Whin Chats belong to the genus Fruticicala, and the Wheatear to the Saxicola; their favourite resorts are open commons and heaths, where furze bushes, brambles, sloes, or other shrubs abound; and they are fond of perching on heaps of stones or other elevations, from whence they make short, but swift, darting flights, in pursuit of the winged insects that form their principal food. They hop rapidly on the ground, and have a curious jerky motion of the

tail. Their nests are large, and lined with wool, hair, or other soft materials; and their eggs of various shades of blue.

The Warblers are distinguished from the Chats by their more slender form, and the narrowness of their beaks at the base. The Grasshopper Warbler, which belongs to the genus Sibilatrix, frequents thickets and patches of furze, and is remarkable for its sharp, chirping note. The remaining birds make their homes in marshy places on the banks of rivers or pools, amid the reeds, sedges, and willows; here they cling by means of their long sharp-pointed claws to the stems and branches, or make short flights in pursuit of the dragon-flies and other insects which are plentiful in such situations. Several of them sing by night as well as by day, and their pleasant warble may be heard when most other birds are silent.

Never tiring, when on high Glowing planets deek the sky, Or the moon, with silvery ray, Chases gathering mists away. Still your song rings lond and sweet When the night and morning meet. Little Warblers of the fen Do ye ever rest—and when:



CHATS AND WARBLERS.

- 1. Stonechat. 2. Whinehat. 3. Wheatear. 4. Grasshopper Warbler. 5. Savi's Warbler. 6. Sedge Warbler. 7. Reed Warbler.



THE STONECHAT,

(Sylvia rubicola.)

PLATE VI .-- FIGURE L.

The scientific name of this bird is derived from the Latin words sylvia a wood, rubus a bramble, and colo to inhabit. It is a common species over the greater part of the European Continent, and has been observed in India, Asia Minor, Japan, and Africa. In this country it may be said to be a constant resident, the young birds of the previous breeding season only leaving us in the autumn to return again at the end of the following March, while the adults remain during the winter. It has been observed in most parts of the island, but is most common in Norfolk, Suffolk, Dorsetshire, Northumberland, and Yorkshire; in the north, west, and south of Ireland, it is constantly to be met with, and has been noticed in Scotland as far north as Sutherlandshire. Macgillivray includes it in his "Birds of the Hebrides," and it is stated to occasionally visit the Orkneys.

The Stonechat frequents open uncultivated spots, such as the sandy downs along the coast, dry commons, heaths, moors, and warrens; it prefers those parts which most abound with furze, brambles, sloes, junipers, and low brushwood; and where the ground is broken and rugged, so that there are many crannics and crevices in which it can retreat. During very severe weather it removes to more sheltered situations, and may sometimes be seen in the neighbourhood of farmhouses and cottages; near Bathgate, in Linlithgowshire, it has been seen in swampy districts in the depth of winter. It is particularly fond of perching on heaps of stones, turf fences, or other elevations, from whence it makes short and rapid flights, after the passing butterflies, or other insects which form its chief food. Of a very timid and wary disposition, this bird will dart off and conceal itself on the least alarm, but it often betrays its presence to the wanderer over the lonely common, by its loud and sharp cry of chat, chat, chat, which somewhat resembles the sound produced by striking two stones

smartly together, and is probably the origin of its name. When hovering in the air at a low elevation, or perched upon the tepmost twig of a bush, this lively and elegant little bird often breaks into a short, but sweet and softly-modulated warble; its performance may be heard from the beginning of April to the middle of June. It is extremely active and restless, rarely remaining in one spot for any length of time, but darting from bush to bush in a succession of short jerking flights, as if it had a vast amount of business to transact in a very short time, or hopping along the ground in an equally rapid manner, then pausing for a moment to give a knowing look round, or to pick up some larva or worm, and jerking its tail in a sudden and spasmodic manner at every bend of its body.

This bird pairs early in March, and builds towards the end of the month. The nest, which is large, with rather a shallow cavity, and composed of grasses and fibrous roots, lined with moss, hair, and feathers, is generally placed on or near the ground, at the base of some bush, in the heather, or occasionally in a hedge adjoining the field or common which the bird frequents. It is well concealed and difficult to find, its locality being rarely betrayed by the birds. The female sits very close, and when off the nest, watches any intruder in order to seize an opportunity of dropping amid the furze so suddenly that the exact spot at which she disappeared cannot be ascertained. During the whole period of incubation the male makes himself conspicuous by his frequent outbursts of song, and he may at times be heard imitating the notes of other birds. The eggs, from five to seven in number, are of a pale greenish or greyish blue colour, and of an elongated oval shape; they are hatched in about a month. The parents exhibit great anxiety concerning the fledglings if any person approaches the nest, uttering their peculiar note in a sharp and excited manner, and practising various tricks to entice him away. The young birds are abroad by the end of May, or the beginning of June, and may be seen in company with the old ones for some time after leaving their snng place of birth. Their plumage is of a pale greyish brown colour, with a white spot at the end of each feather.

The adult male is from five and a quarter to five and a half inches in length, and weighs about five drachms; in his summer dress, the head, back, and neck are nearly black, the latter having a white stripe on each side. The wings are blackish brown, each feather edged with lighter brown, and the hindmost coverts and pen feathers white. The breast is rich chesnut, fading into yellowish white below; the tail nearly black, the irides nut brown, and the legs, toes, and

elaws black. After the autumn moult most of the dark feathers are edged with rufous brown, and the breast and belly become of a lighter colour than in summer.

The adult female is covered on the upper parts with feathers of a blackish brown colour, edged with buff; the throat is blackish, and the breast yellowish brown tinged with dull red; the tail feathers brown, edged with buff; the white spaces on the wings and neck are smaller than those of the male. The legs, toes, and claws are black.

The bird we have been describing is sometimes called the Stone Smith, Stone Chatter, and Blacky-top. Macgillivray names it the Black-headed Bushchat, and applies the title of Stonechat to the Wheatear.

THE WHINCHAT,

(Sylvia rubetra.)

PLATE VI.-FIGURE II.

This bird sometimes goes by the name of the Furze Chat and Whin Bushchat; as its scientific name indicates, its habits and places of resort are similar to those of the Stonechat, last described. During the summer, it is to be met with in suitable localities in Suffolk, Norfolk, Hampshire, Somersetshire, Wiltshire, Gloucestershire, Yorkshire, Durham, and Northumberland, but is rare in the more westerly parts of the island. In Ireland it is plentiful, and in Scotland was seen by Mr. Selby as far north as Sutherlandshire; it also visits Wales. It has been observed in Denmark, Sweden, and Norway, in the latter country especially in those parts that are clear of wood; and is common over the whole of the south of Europe to the shores of the Mediterrancan. In the temperate parts of Russia it is found as far as the Uralian chain, but does not extend to Siberia.

The Whinehats arrive in the southern parts of England about the middle of April, and disperse themselves over the whole island by the end of the month. They frequent open commons and moors, like the Stonechats, selecting those which are covered with furze, sloes, brambles and briars, and are occasionally to be met with on upland pastures,

or on the outskirts of woods. Although Gilbert White, in his "Natural History of Selborne," says that these birds remain in this country during the winter, later authorities agree in stating that they depart in autumn for warmer climates, and express their opinion that the mistake has arisen from their many points of resemblance to the Stonechats, which, as we have said, certainly stay all the year round. There seem to be only two authentic instances on record of Whinchats having been seen in England during the winter months; the first is given by Macgillivray, who received it from his correspondent, the Rev. Robert Holdsworth, of Brixham. This gentleman states, "In a path near my residence, situated at the entrance of the river Dart, I found a Whinchat dead during a very severe frost, January 20th., 1829." The second is to be found in Neville Wood's "British Song Birds;" he says,—"Mr. H. Barlow, of Cambridge, informs me that during the remarkably mild winter of 1833, he observed the Whinchat hopping about near seme furze bushes on a common in his neighbourhood. He supposes that these individuals must have wintered in Britain, as he observed them each time near the same spot. were brisk and lively as at midsummer, and perhaps more so, being incited by the cold to activity. They were never heard to sing." It is probable that the birds observed in the instances mentioned, remained here from some unusual and accidental causes, and there seems little doubt that the Whinchats depart, almost to a bird, in the middle of October, or in very mild autumns at the beginning of November.

The song of the Whinchat, which is most frequently delivered from the topmost spray of a hedge or bush, is sweet and lively, but somewhat disconnected. Its ordinary cry resembles the syllable *chack*, or *chat*, uttered in a short and charp manner, whence, with the furze or whin bush, to which it is so partial, its popular names.

The nest of this bird, generally placed on the ground among shribs or herbage, is composed of stems and blades of grass, mosses, and fibrous roots, and is lined with finer fibres and hair; it measures about six inches in external diameter, with a cavity of about two and a half, and is usually carefully concealed. The eggs, five or six in number, are of a greenish blue colour, sometimes marked with minute brownish red dots.

The malo is from five to five and a quarter inches in length, and of a pale brown colour on the upper parts of the body, with an oval patch of dark brown in the centre of each feather; a white streak runs from the beak over the eye to the ear coverts, and another from the same point along the side of the neck, the two being

separated by a broad streak of dark brown; the irides are brown; the throat and breast a delicate fawn-colour, passing into pale buff beneath. The smaller and foremost wing coverts are dark brown, with light reddish edges, the hindmost wholly or half white. The quill feathers are dark brown, edged with reddish brown, some of the onter ones white at the base. The tail, which is short, is white at the base, except the two middle feathers, and the remainder dark brown, edged with paler brown. The legs, toes, and claws are black.

The female resembles the male, but the white markings on the wings are less extensive, the stripes about the eye yellowish white, and the colouring altogether paler. The young are at first mottled grey and white, but when fully fledged resemble the female.

The food of the Whinchat consists of flies and other insects, slugs, snails, and worms, for which it searches morning and evening, generally resting during the middle of the day.

THE WHEATEAR,

(Sylvia ananthe.)

PLATE VI .- FIGURE III.

From its effective colouring, elegant and compact form, and lively habits, the Wheatear is one of the most attractive of the sylvan birds. It arrives in this country about the middle of March. Mr. Couch remarks, that on the coast of Cornwall, "this bird reaches our shores so early as to prove that it must have taken flight from the French coast long before daylight. Few come after nine o'clock in the morning, and none after twelve. They sometimes perch on our fishing boats, at two or three leagues from land, in an almost exhausted state. They do not cross the Channel every day; and as it usually happens that our own residents are not the first to arrive, it is common for them to abound in the morning; but in the afternoon, and for a day or two after, for not one to be seen."

In a few weeks they spread themselves over the whole island, selecting stony slopes in the vicinity of pastures, sandy downs along the sea coast, and valleys in the more mountainous districts, as their

places of resort for the summer months. They are nowhere more abundant than on the extensive downs of Sussex and Dorset. In Wales and Ireland they are plentiful, and are among the commonest birds of the Orkney and Shetland Isles, and the outer Hebrides. Macgillivray says, "The stony slopes of Arthur's Seat and Salisbury Craigs, in the King's Park, near Edinburgh, are favourite resorts of the Wheatears: and there, although they are much disturbed by boys, their manners may be satisfactorily studied with little trouble. So abundant are they in Harris, that the boys regularly search the walls every year in the beginning of May for their nests, of which great numbers are destroyed, the object of the plunderers being to procure their eggs for food."

These birds are to be found over the whole continent of Europe, but are most abundant in the warmer parts bordering on the Mediterranean, and in Norway and Sweden. They have been observed in Asia Minor, the Faroe Islands, and Iceland, and a specimen was seen by Captain James Ross in Arctic America.

The adult male is about six inches and a half in length, and weighs six and a half drachms; the irides are dark brown; a black line extends from the beak to the ear coverts, beneath the eye and on the cheeks it expands to a considerable width; a narrow line above this is white. The whole upper part of the body is a light ashen grey, slightly mottled with reddish brown. The chin and throat are a dull yellowish white, and the breast yellowish brown; the wing coverts and quill feathers are almost black. The tail is white for the two thirds nearest the body, and the remainder black, except the two centre feathers, which are entirely black. The bill, feet, and claws, are black.

The female is reddish grey on the back, and generally darker than the male; the white of the tail is tinged with red, and the smaller wing coverts edged with the same colour. After the first moult the male and female both exhibit the reddish grey tint on the back.

Like the Stone and Whin Chats, these birds are fond of perching on slight elevations, from whence they can keep a sharp look-out all around them. They are very alert and wary, and will rarely allow any intruder on their haunts to approach very closely, betaking themselves to walls or hedges, along which they fly with great celerity, incessantly emitting their cry of chack, chack. Their song is short, lively, and sweet, and is frequently uttered while they hover at a small height in the air. When engaged in searching for food, which consists entirely of slugs, worms, snails, and small insects, these birds hop along the ground with rapidity, jerking out the tail, and inclining the body in the manner of the other Chats, whenever they stop.

The nest, which is commenced at the end of April or beginning of May, is constructed in holes in walls, hollows in gravel or chalk pits, or deserted rabbit burrows. It is large, with a somewhat shallow cavity, and is generally formed of grass and fibrous roots, and lined with moss, hair, and feathers, but the materials vary according to the locality. The eggs, from four to seven in number, are of an elongated form, and of a delicate pale blue colour; they are said to be of a most delicious flavour, and are strongly recommended for invalids.

In the southern part of England Wheatears are captured in immense numbers, and sold in the markets for food; their flesh is delicate and agreeable. Pennant states that as many as 1810 dozen have been taken in one season in the neighbourhood of Eastbourne, and in the Linnaan Transactions it is recorded that no less than 84 dozen were caught by a shepherd in a single day. The snaring time is from St. James' Day, the 25th. of July, to about the third week in September, and during this period it is not unusual for a shepherd and his lad to manage from six to seven hundred traps. These are simply constructed by placing two tufts on edge, with a small horse-hair noose attached to a stick at each end. On the slightest alarm, even the shadow of a passing cloud, or a few drops of rain, the birds run beneath the turf and become entangled in the nooses.

THE GRASSHOPPER WARBLER.

(Sylvia locustella.)

PLATE VI .- FIGURE IV.

This elegant bird is sometimes called the Grasshopper Chirper, the Cricket Bird, or the Sibilous Brakehopper; its scientific name locustella, means a small locust, and is applied to it from the resemblance its cry bears to the chirp of the grasshopper. In the "Natural History of Selborne," Gilbert White says, "Nothing can be more amusing than the whisper of this little bird, which seems to be close by though at a hundred yards distance; and, when close at your car, is scarce any louder than when a great way off. Had I not been a little acquainted with insects, and known that the grasshopper kind is not yet hatched,

I should have hardly believed but that it had been a *locusta* whispering in the bushes. The country people laugh when you tell them that it is the note of a bird."

On the European Continent this species is found during the summer in the central and southern parts, but is nowhere very abundant. It is sometimes seen on the banks of rivers in Holland, but is rare in that country. It arrives in the south of England about the middle of April, and gradually spreads northwards, reaching the district around Edinburgh in the early part of May. Within a few miles of London this bird has been noticed, and in most of the counties bordering on the English Channel, also in Essex, Suffolk, Norfolk, Yorkshire, Cumberland, Northumberland, and Durham. Montagu says it is especially plentiful on Malmsbury Common, in Wiltshire. In a few instances it has been seen in Ayrshire and Galloway, in Scotland, and is plentiful in South Wales and Ireland.

In its habits the Grasshopper Warbler is remarkably shy and vigilant, especially during the breeding season, so that in places where it is moderately abundant it is not often seen; it rarely ventures far from some thicket or clump of bushes, and secretes itself on the slightest alarm. Yarrell says it will creep along for many yards in succession under a hedge, more like a mouse than a bird. Its food consists of insects, slugs, and worms; it is supposed that its peculiar cry may serve as a decoy to grasshoppers, who mistake it for the call of one of their own kind.

The nest of this bird is cunningly concealed in hedges and thickets, and very difficult to find. Mr. Weir thus relates how he discovered one at Wallhouse, near the top of Bathgate Hills. "I was watching a pair of Stonechats feeding their young, when I observed a little bird, which I had never before seen, rise in the air again and again in pursuit of flies. I immediately ran to the spot to get a nearer view of it, and after a good deal of searching at length discovered its nest. It was placed in the middle of a clump of very thick whins, and completely overhung by their prickly branches. So cunningly was it concealed, that I was obliged to beat the female out of it several times before I could find it out." The nest was rather large, and composed of stems and blades of grass, lined with finer portions of the same material. It contained six beautiful white eggs, freckled all over with carnation spots.

In form this bird is slender and elegant, but its plumage is plainly coloured. The upper parts of the male are dull olive brown, each feather having a dusky spot in the centre. The beak is brown, and the irides hazel. The wing and tail feathers are dark greyish brown, edged with

reddish brown, appearing, in certain lights, to be marked with indistinct transverse bands. The chin, throat, and breast are pale yellowish brown, the latter slightly mottled with darker brown. The legs, toes, and claws are pale brown. The weight is about three drachms and a quarter, and the length a little over five and a half inches. The female is a little smaller, but of a similar colour, except that the breast is without the darker spots. The young are of a yellowish brown, spotted above with dusky brown.

SAVI'S WARBLER,

(Sylvia luscinsides.)

PLATE VI .- FIGURE V.

A SYLVAN bird resembling the nightingale, is the meaning of the scientific name of this species. It was first observed in Tuscany by Professor Savi, who published a description of it in the year 1824, but since that time has been found in France and other parts of southern Europe, and also in Africa. In England the earliest specimen recorded was captured in 1825, in the marshes near Norwich, by the Rev. James Brown; and others were procured from the fens of Cambridgeshire by Mr. J. Baker, and presented to the British Museum in 1840. Although for a long period considered extremely rare, it is now known that this Warbler is abundant in the marshy districts of both Huntingdonshire and Cambridgeshire, where it breeds regularly every season.

Of extremely shy and wary habits, this species hides among the reeds and bushes on the least alarm, rarely permitting an intruder on its resorts to obtain more than a brief glimpse of its form and plumage. Its nest is placed on the ground, and formed of the leaves of the reed, curiously wound round and interlaced, but is without any other lining. The eggs are dull white, speckled with pale red and light grey. Its note is peculiar, and has been compared to the whirring noise made by a spinning wheel.

The plumage of the upper parts of the male is reddish brown, the tail is of the same colour, faintly barred with darker bands. The chin and throat are almost white, and the breast pale reddish brown, becoming darker on the under surface of the body. The legs, toes, and claws are pale brown. Total length five inches and a half.

THE SEDGE WARBLER,

(Sylvia salicaria.)

PLATE VI .- FIGURE VI.

This delicate and lively little bird, which goes by the names of the Sedge Reedling, Sedge Wren, Sedge Bird, and Reed Fauvette, is generally to be found during the summer, along the margins of rivers and pools which are overgrown with sedges, reeds, or other aquatic plants, but it sometimes resorts to hedges or bushes, at some little distance from water. Its ordinary note is a somewhat shrill cheep, but its song is lively and modulated, though very varied, and often uttered in an excited and hurried manner. It sings almost constantly, by night as well as by day, scarcely ever seeming to take rest; Neville Wood states that he visited a spot, (where he knew from observation but a single pair of these birds dwelt,) at intervals of an hour throughout a summer night, and always heard their notes. Nor are these merry Warblers effected by the burning heat of mid-day, in their cool and shady retreats, for they then pour forth their varied strains with the same unflagging energy. Neither rain, storm, nor wind seem to make any difference to them.

The Sedge Warbler arrives in England towards the end of April, and remains until the beginning of October; it is however recorded that a specimen was seen near High Wycombe, in Buckinghamshire, in winter. In Norfolk, Suffolk, Essex, Lincolnshire, Lancashire, Yorkshire, and Northumberland, it occurs plentifully, and has been observed in Cornwall, Devonshire, Dorsetshire, and Hampshire. The marshy reed-covered spots on the banks of the Thames, are also favourite resorts of this bird; it is here little disturbed, as the soft and swampy nature of the ground protects it from intrusion. It visits Wales and the north of Ireland, and is not uncommon in many parts of Scotland. In Germany, France, and Italy it is abundant, and also in the numerous marshes of Holland. It has been observed in Norway and Sweden, and in Russia and Siberia, even as far as the Arctic Circle.

The fool of this bird consists of the insects to be met with in swampy districts, which it pursues on the wing, and of worms and slugs. Its nest is usually placed near the ground, among reeds, willows, or coarse herbage, and is often compound of stalks of grass and other slender plants, and lined with finer grass and hair, but the material varies with the locality; one found by Mr. Weir in a whin bush, was formed of moss and straw. It is generally bulky and loosely constructed, although neat and shapely. The eggs, five or six in number, are of a pale yellowish brown colour, slightly mottled with light brown and dull grey; some have been found, however, nearly white, and others of a dull yellow; they are hatched towards the end of May or the beginning of June. The female sits very close, and will allow a person to pass quite near to the nest without moving. During the breeding season it is a difficult matter to eatch a sight of either of the birds, as they seek their food among the reeds, and rarely fly high into the air, or perch in conspicuous places. "To observe the habits of this bird, and to gain a competent knowledge of its way of life," says the enthusiastic author of the "British Song Birds," "it is necessary to lie down amongst the grass and aquatic plants, as the Sedge Warbler is so extremely shy and timid, that the moment you enter within its territories it darts down into the midst of the thickest foliage the place affords, and is no more seen as long as you remain near the spot, though it will favour you with its song, even if you approach within two or three yards of the bird. It is true that it may not be very pleasant to lie down on one's back for half an hour in the marshy places frequented by these birds, and might appear preposterous to a common person, yet the ornithologist considers it no inconvenience, and indeed scarce bestows a thought on his situation while engaged in studying the manners of his feathered friends." Few of our readers will probably care to rnn the risk of a severe attack of rheumatism by following the directions here given, and we can scarcely blame them; a considerable amount of information respecting the habits of these and other birds may be gained, however, in a more agreeable manner, by means of a good field-glass. Water-rats, weasels, and other nocturnal brigands, sometimes make sad havoc in the nests of the Sedge Warblers, destroying both the eggs and the young birds, and sometimes even attacking the adults, when they have composed themselves for slumber.

This species resembles the Grasshopper Warbler, both in form and habits, but may be distinguished therefrom by a broad yellowish white band, which extends from the bill over the eye. The male weighs about three drachms, and is nearly four inches and a half in length;

the beak is brown, the upper part of the head brownish black, streaked with a lighter colonr, and the back and wing coverts pale reddish brown, with a dark spot in the centre of each feather. The tail is also brown, the chin and throat white, and the breast and lower parts dusky white. The irides are brown, and the legs, toes, and claws of the same colour. The female is slightly larger than the male, and has the band over the eye less distinct, and the head and upper parts of a lighter tint. The young when fully fledged resemble the adults, but are more tinged with red.

Where rushes hide the stagnant pool, or fringe the gliding stream, And in the sunshine dragon-flies, like winged jewels, gleam; Where on the borders of the marsh the stunted hawthorns grow, And thrift, and wild sea-lavender, shed o'er a purple glow; Where alders tremulously stand, and osier twigs are seen To dance unto the singing breeze, like fairies clad in green; Where drooping willows kiss the wave, and whistling reeds in ranks Incline their velvet heads unto the shores and shelving banks; Where dives the purple water-rat; where leaps the speckled frog; And flies and midges gaily sport above the quaking hog;-'Tis there the blithe Sedge Warbler dwells, and there his nest he builds In rushy tuft, or whatso'er the needful shelter yields; 'T is there he singeth constantly, a sweet, though scarce-heard song, When skies are beautifully blue, and summer days are long, And sometimes in the misty morn, and sometimes in the night, He chanteth out right merrily, to show his heart is light. He glanceth 'twixt the bending reeds, he skimmeth o'er the tide, And many a snug retreat is there, his form from foes to hide; Come weal, come woe, his constant mate still sitteth on her nest, And food is plentiful, that he may pick and choose the best; And for his rising family he hath no anxious eares, Like men, that know the world is full of pitfalls and of snares; With fears, that truly prophesy, his heart is never stirred; He is unconscious of all these-oh, happy, happy bird!

THE REED WARBLER,

(Sylvia arundinacea.)

PLATE VI .- FIGURE VII.

LIKE the other Warblers we have been describing, this bird frequents swampy districts bordering on lakes and rivers, and overgrown with aquatic plants, hence its scientific name arundinacea, of or appertaining to reeds. It seems to have been first noticed in England by the Rev. John Lightfoot, whose account of its appearance and habits was read before the Royal Society, and printed in their volume of Transactions for the year 1785. Although somewhat locally distributed, it has been seen in the counties of Essex, Kent, Surrey, Norfolk, Northamptonshire, Staffordshire, Derbyshire, and Lincolnshire. A few specimens have been taken in Devonshire, but it is there considered rare. In Ireland it is recorded that one was shot by Robert Montgomery, Esq., of the Manor House, Raheny, near Dublin, on the 21st. of December, 1843, and another was observed near Belfast, but it has never been noticed in Scotland. This bird frequents Germany and France, is abundant in the marshes of Holland, and, according to Professor Savi, is often met with in Italy from spring to October.

The Reed Warbler, also called the Marsh Reedling and Reed Wren, is sometimes mistaken for the Sedge Warbler last described, which it resembles in size, habits, and the localities it frequents. It may, however, be readily distinguished by its longer bill, the uniform tint of the upper parts, and the absence of the light band over its eye. Its song, which is varied and pleasing, is often performed at night, and has obtained for it the name of the Night Warbler in some localities. The note of a bird, in any situation, heard in the stillness of the night, when all around is dark and dismal, has a most pleasing effect; but to the traveller on the deserted roads and paths that skirt the edges of rivers, where the only sound that breaks upon the ear, is the rustle of the reeds or the gurgle of the stream, the suddenly

outbursting song of the Reed Warbler has a peculiar charm, telling of life and happiness, where all else suggests to the mind ideas of gloom, decay, and death.

The nest of this bird is generally placed in the centre of a group of rushes, at the height of about three feet from the surface of the water; the materials of the exterior, blades and stalks of grass, are twined and interlaced around the stems of four or five rushes, in such a manner as to securely hold the structure in its place; the interior cavity is deep, and lined with fine grass, hair, and wool. Here, well sheltered and concealed, the young are reared, the wind performing the part of nurse as far as rocking the eradle goes. The eggs are usually four or five in number, of a greenish white colour, spotted and freekled with ash green and light brown.

Towards the end of autumn these birds may sometimes be seen in gardens and about houses, searching for insects, worms, and slugs; Sweet states they are particularly fond of house flies, and may readily be caught in traps baited with small moths or green caterpillars.

The adult male is about five inches and a half in length, and weighs nearly three drachms. The irides are chesnut brown; the upper mandible of a pale brown, and the under yellowish white, and brown towards the end. The plumage of the upper parts is of a uniform pale reddish brown colour, with a tinge of chesnut; the quill feathers are darker brown. The chin and throat are white, and the breast and lower parts pale greyish yellow; the legs, toes, and claws pale brown. The female is rather smaller than the male, but of a similar colour.

IN CONFINEMENT.

The Stonechat should not be introduced into the aviary in an adult state, as it is almost certain to pine, refuse food, and die, but the young may often be reared, with care and attention. They must at first be fed on ants' eggs, but as they grow older, bruised hemp seed and bread, with very small pieces of lean raw beef or mutton, mixed together into a moist paste, will suit them well. All kinds of insects may be given them as often as they can be procured, and eggs boiled hard and chopped very fine form a wholesome occasional change. The kind of cage recommended by Beehstein for these and other sylvan



CHATS AND WARBLERS.

- I. Stonechat. C. Whinchat. C. Wheatear. 4, Grassboffer Warbler. 5. Savi's Warbler. 6. Sedge Warbler. 7. Reed Warbler.



birds, has wires in the front and on the two sides, with a close back, and a green baize top. It should be eighteen inches long, thirteen inches high at the sides, and fifteen inches in the middle under the roof. In such a cage, the Stonechat will be likely to thrive, and will prove a most interesting and agreeable pet, singing sweetly all the year round, both by day and night, and imitating the notes of other birds which may be placed near it, with great facility.

Although the Whinehat may be kept alive for some time in confinement, Bechstein states that "it is always quiet and melancholy; if allowed to run about, it only moves to procure food, and resumes its place immediately, with its head sunk upon its breast." This of course refers to the adult, and after such a description, from so great an authority, few of our readers will probably care to deprive one of the pretty creatures of its liberty; the young birds, however, may be sometimes brought up, if treated in the manner described for the Stonechat.

The Wheatear, although rather difficult to rear, is an attractive occupant of an aviary. Sweet says, "it is very amusing to see these birds play, flying up and down, and spreading open their wings in a curious manner, dancing and singing at the same time." When first taken they must be fed plentifully on ants' eggs and meal-worms; afterwards the diet of bruised hemp, &c., already described, may be gradually substituted, but they should be often fed on insects, of which cockroaches and crickets are their especial favourities.

The Grasshopper Warbler should be taken young, and reared in the nest, which should be placed in a covered basket, nearly filled with dry hay or moss. Great attention must be paid to cleanliness, and its food, consisting of the paste before recommended, should have a few very small gravel stones mixed in it. Of the treatment of Savi's Warbler we are unable to give any certain information, as we have never met with a case of one kept in confinement.

The Sedge Warbler is a most charming pet, it soon becomes very tame, and will perform its prettily modulated song nearly all the year through. To keep it in health, it should have free access, during the warm weather, to a dish or pan of water, as it is particularly fond of bathing, and will sometimes perform its ablutions three or four times in the course of a day. In the winter it must not be allowed this luxury more than once a week, the water should be placed in the cage in the morning, and removed as soon as the bird has made use of it. When first caught, flies, caterpillars, and maggots, form its best food; these after a few days may be mixed with a small quantity of bruised hemp seed, and finely cut raw lean meat, well moistened

together. The Reed Warbler should be treated in a similar manner, but is a delicate bird, and does not become easily reconciled to confinement. It must not at first be shut up without companions, but should be placed in an aviary with a number of other tame birds; if this cannot be done, its cage should be hung near that of some other of its species. After a time it becomes very tame and familiar, and has an agreeable habit of singing in the morning and evening twilight.

WARBLERS.

TITE have here another group of Sylvan Birds or Warblers, and a specially interesting one, as it contains our unrivalled songster, the Nightingalo, and another bird only second on the list of woodland choristers for the perfection of its vocal powers—the Blackcap. How marvellous is the gift possessed by these little creatures, of pouring forth so powerful and rich a melody from such tiny throats, filling the very air of the woods and groves in which they dwell with their sweet thrilling music. Could human beings possess an equal amount of power in proportion to their size, what singers we should have, the inhabitants of a whole town might listen to their voices without even leaving their homes. The Nightingale is the only British representative of the genus Philomela; it is distinguished from the birds of the genus Sylvia, to which the Blackcap and the other species in our group belong, by its more slender form, and longer wings, legs, and tail. It feeds on insects, and is a migratory bird in this and other temperate countries. The Sylviæ or Warblers are sprightly active little birds, frequenting woods, plantations, hedgerows, gardens, and orchards. Their bills are short, straight, and thin, their tails and wings of moderate length, their legs rather short, and their feet slender. In plumage they are not brilliant or conspicuous, being for the most part of a greyish or reddish brown tint on the wings and upper parts; the black head of one, and the white throats of two others, are their most prominent features.

Their nests are cup shaped, and generally neatly constructed, although some of them are thin and loosely woven; they lay from five to seven eggs, mostly of a greenish white colour, and rear at least two broods in a season. They are all migratory birds, but do not perform their journeys in large flocks, the males arrive in this country first, and the females several days, or in some cases over a week later. They feed on insects, of which they destroy immense numbers, ridding our fruit trees and crops of the aphides, caterpillars, and other pests, that would inevitably, without their timely aid, reduce the face of nature to a leafless and desolate wilderness. They are certainly also great eaters of cherries, currants, raspberries, and other fruit, but we must regard their depredations as the wages, and remarkably small ones too, for the vast amount of valuable work they perform. With Bishop Mant we heartily agree when he says;—

"Molest them not! the vernal bloom

If chance the prying bill consume,
The ill o'erlooked they'll more than buy
The indulgence with the snail or fly
Excluded:—if the ripening fruit
Perchance their curious palate suit,
To the pleased ear they more than pay
Its value with the tuneful lay."



WARBLERS.

1. Nightingale. 2. Blackcap. 3. Orphean Warbler. 4. Garden Warbler.

5. Whitethroat. 6. Lesser Whitethroat.



THE NIGHTINGALE,

(Philomela luscinia.)

PLATE VII .- FIGURE I.

This bird, the undisputed prince of songsters, arrives in England about the middle or end of April, the males reach our shores first, and the females from seven to fourteen days later. It settles in most of the southern, midland, and eastern counties, extending as far north as York and Carlisle, but does not visit the western districts, none being found in Cornwall, Wales, or Ireland. But few individuals reach Scotland, and although attempts have been made to introduce it into that country by Sir John Sinclair, they have proved unsuccessful.

On the Continent of Europe, the Nightingale is a summer resident in Germany, France, Italy, Spain, Holland, Sweden, and Denmark, and has been found in Russia and Siberia. During the winter it has been seen in Egypt, along the banks of the Nile, and also in North Africa and Syria. The localities most frequented by this bird are woods, copser, and plantations, it generally prefers those where there is a thick undergrowth and a moist soil, it is also found among thick hedges in sheltered situations, and in shady gardens. Some authors have affirmed that it delights in places where there is an echo, but although it may sometimes be heard in such spots, it seems hardly probable that they have been selected by the bird for that reason.

The song of the Nightingale has been the theme of poets of all ages, and prose writers seem to vie with each other in describing its charms in the most rapturous and enthusiastic language. Of the latter few have written more honestly and fervently than that sincere lover of all animated beings, Isaac Walton; he says "But the Nightingale, another of my airy creatures, breathes such sweet loud music out of her little instrumental throat, that it might make mankind to think that miracles are not ceased. He that at midnight, when the very labourer sleeps securely, should hear, as I have very often, the clear airs, the sweet descants, the natural rising and falling, the doubling and redoubling of

her voice, might well be lifted above earth, and say, 'Lord, what music hast thou provided for the Saints in Heaven, when thou affordest bad men such music on earth!'" Most of the poets describe the Nightingale as a melancholy and complaining bird, thus Thompson says,—

"All abandoned to despair she singue."
Her sorrows through the night."

And Milton,-

"Most musical most melancholy bird."

But Coleridge will not allow our sweet songster to possess this character, he says,—

"'Tis the merry Nightingale, That crowds, and hurries, and precipitates, With fast, thick warble, his delicious notes, As he were fearful that an April night Would be too short for him to utter forth His love-chaunt, and disburthen his full soul Of all its music."

On this disputed point let us take the authority of a naturalist, and one well acquainted with the notes of most of our British songsters, Neville Wood-he gives his opinion thus-"The strains of the Nightingale are loud, rich, mellow, silvery and clear, I know few songs which equal it in sprightliness and vivacity, with the exception however of one part, consisting of three or four lengthened notes, which are certainly of a peculiarly melancholy character." For ourselves we will only say, that the few notes here alluded to are so full of special sweetness, that they have certainly impressed us more than the remainder of the song, which in its other parts is somewhat broken, and have thus produced a feeling akin to sadness. Much perhaps may be due to the hour, and the surrounding circumstances under which we have generally listened to his strain, the fast-falling darkness and the stillness of approaching night. If heard in the daytime, as the song of this bird may often be, the livelier part would perhaps be more likely to impress the listener than the more melancholy. This may perhaps account for the difference of opinion we have referred to. Some ornithologists have endeavoured to give an idea of the song of the Nightingale either by means of syllables or musical notes, the most elaborate attempt has been made by Bechstein of which we subjoin a portion for the benefit of our readers, and can only say, if they are able to form

any conception of its beauty, its compass, or any other of its characteristics therefrom, they must be much eleverer than ourselves.

Nightingales do not sing on their first arrival, but await the appearance of the females, for whose ears their amatory strains are intended. As soon as this takes place, their sweet notes may be heard as early as three or four o'clock in the morning, at intervals during the day, and often throughout the night, especially if the moon be shining and the air still. There is great rivalry between the males, and they will sometimes sing against each other until utterly exhausted. Once mated, the Nightingales choose some sheltered spot in a clump of trees or bushes for the construction of their nest, and commence building; the materials they collect are dried leaves, coarso weeds, and fibrous roots, these they place in a somewhat irregular circle of about five and a half inches diameter, upon the bare ground. It is so loosely built, and slightly bound together, that it cannot be moved without falling to pieces, and resembles a heap of debris blown together by the wind, more than the nest of a bird. A lining of hair and fine grass is placed in the central cavity, and in it are deposited from four to six eggs; of a uniform dull olive brown colour. The male brings food to the female while she sits, and sometimes takes her place on the nest. He often perches on a neighbouring tree and warbles delightfully to his mate. but in June, when the eggs are hatched, his song ceases entirely, and both parents occupy themselves in feeding their offspring with caterpillars, worms, and the eggs of ants and other insects. The juveniles quit the nest very early, and may be seen hopping about on the ground or among the branches until they are able to fly. As soon as they are old enough to take care of themselves, the parent birds prepare another nest, and a second, or even a third broad is reared before the summer is over. Should any intruder approach the family residence, the birds utter a kind of croak, as a note of warning, or make a peculiar snapping noise with their beaks, which is supposed to express defiance.

Were there nothing about the Nightingale more attractive than its plumage, it would be among the least noticed of our feathered species, for its garb is of the plainest and homeliest description; nor would its habits make it in any way conspicuous, as it keeps very close in its shady retreats, and conceals itself on the slightest alarm; when it does

take to the wing, it rarely flies high or to any great distance. There are many persons who have frequently heard the sweet song of this modest and retiring bird, but have never caught more than a momentary glimpse of its form. Mudie, in his British Birds, states that he endeavoured to obtain some insight into the habits of Nightingales by personal observation, extending over a period of five years, in a spet where they were abundant, but at the end of that time he was about as wise as at the beginning.

The Nightingale is the largest of the British Warblers, the male being from six and three quarters to seven inches in length, between ten and eleven in the stretch of its wings, and about six drachms in weight. The upper mandible is blackish brown, with a tinge of red, the lower pale yellowish, and dusky brown at the point. The head, back, tail, and wings, are of a uniform rich brown, tinged with chesnut. The chin and threat are dull greyish white; the breast, and under surface of the body, of the same colour, except that the former is slightly tinged with brown. The legs, toes, and claws, are pale greyish brown. The female is similar in colour, but rather less in size. The young have the feathers on the under surface of the body with dark margins, and those on the upper surface spotted with buff colour.

THE BLACKCAP,

(Sylvia atricapilla.)

PLATE VII .- FIGURE II.

The scientific name of this species is derived from the Latin words sylvia a wood, ater black, and capillus the hair of the head; their application is sufficiently plain, as the most prominent feature in the appearance of this little gentleman is his black pate. In some parts of the country he is called the Meck Nightingale, and in the richness and variety of his notes, he is only excelled by our prince of songsters, which he somewhat resembles in plumage. His favourite position when singing is the topmost branch of a bush or low tree, from whence, with distended throat, he pours forth a rich, full, and sweet warble, that charms and delights, while it astonishes the hearer, by the variety of its melodions trills and cadences. Some authors

have affirmed that he is a great imitator of the notes of the Blackbird, Thrush, and other of our finest choristers of the groves, but Macgillivray does not agree with them, he says,-"If you listen attentively, you will be persuaded that the bird is no imitator, but that it sends forth in gladness the spontaneous, unpremeditated, and unborrowed strains that nature has taught it to emit as the expression of its feelings. The song, if divided into fragments, would suffice for half a score of ordinary warblers, and is of surprising compass, and melodious beyond description. None of the notes seem to resemble those of the Blackbird, although they have been so represented; nor are they so plaintive as those of the Thrush. The song is decidedly cheerful, but not merry like that of the Lark, and is therefore not apt to cherish melancholy, but rather to encourage hope, and induce a placid and contented frame of mind, in which are combined admiration of the performer, and a kind of affection towards it, which renders it almost impossible for you to level your death-dealing tube at it." The only points in which the seng of the Blackcap seems inferior to that of the Nightingale, are its volume, and the distinctness of its articulation. This bird sings very constantly, and may be heard late at night and very early in the morning, but it will cease on the slightest disturbance, and hide itself in the densest parts of the thicket or shrubbery, where it will remain until the intruder on its haunts has departed, or will silently withdraw to some more secure retreat. When the young are hatched, the song becomes broken and less melodious, gradually subsiding into the usual callnote, which resembles the syllables tak, tak, frequently and sharply uttered. The female sometimes sings, but not so loudly or so sweetly as the male.

This species is most extensively distributed, being found in all the temperate countries of Europe. In Germany it is called the Monk, from its hood or cap; the French call it Fauvette à tête noir—the Fauvette with the black head. In many parts of Africa, and in Persia, Java, and Japan it is well known, as also in Madeira and the Azores; in the latter islands the female is called Red Hood. It arrives in England about the middle of April, and departs in September, but a few individuals remain throughout the winter. One was caught in Bedwardine, near Worcester, on the 20th. January, 1843; another near Dover, in January, 1847; and a third in Norfolk, in December, 1852; others are stated to have been seen in the neighbourhood of Bristol during two successive winters. The counties in which it is most plentiful are those along the southern coast from Sussex to the Land's End, but it has been met with in all parts of the country. It visits

Wales and the North of Ireland. In Scotland it has been observed throughout the sonthern parts. It is not uncommon in the valley of the Clyde, especially about Hamilton; and occurs in Renfrewshire, Ayrshire, Perthshire, and Forfarshire. Mr. T. Edwards has heard these birds sing near Bauff, at Mayen and Rothiemary, and in the grounds of Duff House. They have never been noticed in the Shetland Isles, but a single specimen is recorded to have been shot in Orkney, in the summer of 1846.

The favourite resorts of the Blackcap are woods, plantations, thick hedges, shrubberies, gardens, and orchards. It builds its nest in the fork of a bush, at the height of two or three feet from the ground, and is very careful in selecting a well-sheltered and thoroughly concealed position, sometimes even abandoning the structure before it is completed in two or three instances, in consequence of some real or fancied insecurity in the spot chosen. In construction the nest is strong and tolerably compact, although slight. The materials of the exterior are dry grass and fibrous roots, mixed with a little wool or moss; the interior is lined with fine fibrous roots and hair. The eggs, four or five in number, are usually of a pale greenish white colour, faintly mottled with brown and grey, and spotted and streaked with blackish brown. They vary a good deal both in colour and size; specimens have been found of a beautiful salmon colour, and others pure white, richly blotched with red. The males share with the females the duties of the nest, but they have a habit of singing loudly when so occupied, and thus sometimes attract the notice of the passer by, and cause the discovery of the nest, and the loss of

These birds feed largely upon insects, but also upon raspberries, red currants, cherries, and other fruit. They are also very partial to elderberries; Mr. Stevenson, in the "Birds of Norfolk," says,—"I once saw a Blackcap partaking of these berries with such amusing voracity that he finished a large bunch in detail before he noticed my face within a few inches of his fruit-stained beak. At that moment his combined expression of fright and repletion was one of the most comic bird scenes I ever witnessed. A small unfeathered biped, caught in the very act of clearing a jam-pot, with his rueful countenance besmeared with the sweets, would perhaps form the nearest approach to the guilty look of that little glutton." When searching for caterpillars, beetles, and flies, these birds wind about among the branches in a most graceful and agile manner, inspecting every likely spot with the closest care and attention, and making their way through the thickest underwood with wonderful ease and rapidity.

The male Blackeap is from five and three quarters to six inches in length, and about eight and three quarters in the stretch of the wings; it weighs nearly four drachms and a half. The bill is dark horn-colour, paler beneath, the edges yellowish grey; the irides dark hazel; the top of the head above the eyes jet black; the chin, neck, and throat ash grey, and the breast of the same colour on the upper part, and white tinged with yellowish grey on the lower. The back, wings, and tail are greyish brown; the legs and toes lead-colour, the latter tinged with green beneath; the claws brown. The female resembles the male in size and colour, except that the head is reddish brown on the crown, and the other parts of the body more tinged with brown. The young, when fully fledged, resemble the adults, but the hood is not so conspicuous. They are said to leave the nest sooner than most other birds of the same family, and to roost for some time afterwards on the branches with the parents.

THE ORPHEAN WARBLER

(Sylvia orphea.)

PLATE VII. -- FIGURE fil.

The "Zoologist" records that a specimen of this bird was shot on the 6th. of July, 1818, in a small plantation near Wetherby, in the West Riding of Yorkshire, and preserved by Mr. Graham, of York, for W. M. E. Milner, the then M.P. for that city. It was a female, and appeared to have been sitting the same summer. For some time previously it had been noticed in the neighbourhood in company with the male.

In Italy the Orphean Warbler is abundant, especially in Lombardy, Piedmont, and Tuscany. It is also common in the southern parts of France, and has been noticed in Switzerland and the surrounding districts.

The male is a little over six inches in length, it has a strong and thick bill, of a black colour, the upper mandible is very much grooved, and the lower of a yellowish brown at the base; the head and neck are dark brown, and the back of the same colour, but rather lighter; the chin, throat, and breast are white, the latter having a delicate tinge of rose-colour. The wings are nearly black, edged with greyish

brown; the tail dark reddish brown, slightly tinged with olive, except the outer feather on each side, which is white, tinged with brown on its inner edge, and the second, which is tipped with white. The under tail coverts are pale reddish brown; the legs, toes, and claws black.

The female is about the same size as the male, and similar in colour, but without the rose tint on the breast.

The nest of this bird is built in hedges and low bushes, or in holes in rocks and walls; sometimes also in the roofs and under the eaves of outhouses and deserted buildings. The eggs, four or five in number, are dull white, mottled with yellowish brown, and spotted with darker brown, chiefly at the larger end.

The food of the Orphean Warbler consists of insects and berries.

The scientific title of this species is derived from the Latin, sylvia a wood, and Orpheus, the name of the celebrated musician of antiquity, who charmed the birds of the air and the beasts of the field by the sound of his lyre.

THE GARDEN WARBLER,

(Sylvia hortensis.)

PLATE VII. FIGURE IV.

This bird, as both its English and scientific titles indicate, is a lover of the cultivated garden and orchard, but it also frequents woods, shrubberies, and thick hedgerows. It goes by the several names of the Greater Pettychaps, the Garden Fauvette, and Billy Whitethroat. The first specimens found in this country were obtained in Lancashire by Sir Ashton Lever, who made the species known to British emithelogists. It has since been found in the counties of Norfolk, Suffolk, Wiltshire, Devonshire, Yorkshire, Durham, and Northumberland. In Oxfordshire and Cambridgeshire it is abundant, and is not uncommonly seen in the market gardens around London. In Ireland a few specimens have been found, but it is there extremely rare. Throughout Scotland it is frequently met with, especially in the wooded parts bordering on lakes and rivers. It does not appear to have been noticed in Wales. It is a resident in all the temperate and southern parts of Europe throughout the summer months.

The Garden Warbler arrives in this country about the end of April or the beginning of May, but being of plain and inconspicuous plumage, and of secluded habits, rarely attracts notice even in the places where it is most abundant. Gilbert White, keen observer as he was, does not appear to have noticed it, although it is very common in the neighbourhood in which he resided. It generally warbles from the middle of a thick clump of bushes or brakes, not often perching in an exposed position like the Blackcap. Its notes are remarkably soft and rich, somewhat resembling the Blackbird's, but they want the silvery clearness of the Nightingale's. Mr. Bligh states that he has heard it sing with great spirit against the latter bird, as if it were determined not to be outdone. Sometimes its strains are continued for half an hour without intermission, and it often chooses the calm and delightful period of twilight for its sweet warble, singing as it were a farewell to departing day.

The food of this bird consists largely of insects and grubs. Sweet states that it is especially partial to the caterpillar of the cabbage butterfly, and is almost the only bird of its genus that will eat 10. As a compensation for its services to the gardener in ridding the trees and plants of insect pests, it helps itself somewhat liberally to the strawberries, currants, raspberries, and cherries, not despising the ripe pears, plums, and early apples.

Its nest is built on or near the ground, in a thick hedge, a patch of tall rank grass, or a bed of nettles. It is usually constructed of goose or other grass, straws or bents, mixed with a small quantity of wool or moss, and lined with fine fibrous roots and hair. Sometimes it is attached to the branches by means of spiders' webs and the cocoons of chrysalides. It is loosely woven, and not very carefully concealed. Mr. Jesse mentions having found one three times in succession in an ivy tree against a wall. Another was taken by M1. Yarrell in a row of peas in a garden. The eggs, four or five in number, are of a dull yellowish grey or pale purple brown, spotted and streaked, chiefly at the larger end, with light grey and ohve brown. Although the young do not generally quit the nest until they are nearly full grown, Neville Wood says that on suddenly approaching a nest, he has seen the whole brood dart out by common consent, and although he has searched for them with the ntmose diligence, they could not be discovered, as they squat down and lie perfectly quiet among the long grass until an intruder leaves the spet.

The Garden Warbler closely resembles the Blackcap, both in size and form. There is scarcely any difference between the plumage of the male and female, except that the latter is of rather a paler colour.

The bill is dark brown, the edges and base of the lower mandfole yellow; the legs, toes, and claws, greyish brown. The upper parts of the body are of a uniform light greyish brown, with a slight tinge of orange. The wing coverts and quills are dusky brown slightly margined with olive, the under wing coverts of a delicate buff colour. The chin and throat, and breast, are brownish white, the upper part of the latter tinged with reddish brown, and fading into greyish write on the under surface of the body. The young, when fledged, resemble their parents, but have a somewhat yellower tint. Two broods are generally reared in a season.

Although this bird does not appear to be esteemed in the British Isles as an article of food, it is captured in large numbers on the Continent for the tables of the dainty; this may be owing to the fact that in the sunny climes of Italy, Spain, and the South of France, it feeds largely on the figs, grapes, and other rich fruit that there come to perfection, and its flesh is probably more delicate and delicious in

consequence.

THE WHITETHROAT,

(Sylvia cinerea.)

PLATE VII.-FIGURE V

Or the Warblers that visit this country, the Whitethroat is the most abundant and extensively distributed; it has been seen in almost every county, but is commonest along the southern coast, from Kent and Sussex to Cornwall. In Yorkshire it is plentiful, but in Durham and Northumberland is less numerous. In Scotland it has been observed in Argyleshire and Sutherlandshire, and a specimen was shot in the Orkneys, at Sandy, in May, 1850. It is a regular summer visitor to all parts of Ireland. As might be expected from its plentiful distribution, this species has a variety of popular names, many of them more expressive than elegant; here are some of them. Wheatic-why, Churr, Muff, Muffet, Why-beard, Peggy Whitethroat, Muggy, Beardy, Blethering-Tam, Whallie, Whiskey, Nettle Creeper it is also called the White-throated Warbler, and the Greater Whitethroat. There are few parts of Europe that this bird does not visit: it is common during the summer in Holland, France, Spain, Italy. Sardinia, and Germany, and has also been observed in Russia, Siberia,

Norway, Sweden, and Denmark. Specimens have been received by the Zoological Society from Trebizond, and it has been noticed in Smyrna.

The males arrive in this country about the third week in April, and resort to the borders of woods, thickets, plantations, and gardens, but more particularly to bushes and hedgerows, where they await the arrival of the females, which takes place ten or twelve days later. They depart for warmer climates about the end of September; a specimen was shot, however, in 1843, at Raheny, near Dublin, as late as December. The song of the Whitethroat is loud, lively, and for the most part sweet, but it contains a few somewhat harsh notes; it is performed in a sprightly and earnest manner, usually from the top of a hedge; the bird accompanies it with many curious jerks of the wings and tail, at the same time erecting his erest and widely distending his pretty white throat. He warbles from sunrise to sunset, not ceasing even during heavy rain and thunder-storms. Macgillivray says,-"if you be walking along a hedge in the early twilight, the little creature is sure to come up, announcing its presence by a song, and flitting in advance for perhaps a long way. One morning in July, 1835, when approaching Edinburgh after walking all night from Glasgow, I encountered several Whitethroats in this manner, some of which accompanied or preceded me several hundred yards, although I could not see one of them." It has been noticed that at the pairing time these birds will mount into the air to a considerable height, in a curious kind of circuitous flight, pouring forth their notes at the same time in an excited and vehement manner.

Of extremely active and restless manners, the anties and gestures of these elegant little birds are most amusing to watch, as they sport merrily in the hedges, and dart from tree to tree with many a jerk of the tail and twist of the body, now and then pausing for a moment and glancing around, with a knowing and roguish twinkle of the eye. "The peasant boys in East Lothian," says Mr. Hepburn, "think that these birds are mocking or laughing at them as they tumble over the hedges and bushes in the lane, and they therefore persecute them at all times, even more virulently than they do Sparrows. They frequently enter our gardens in search of food. They delight to mob cats, never ceasing their alarm-note till their foe retires."

The food of the Whitethroat consists chiefly of insects and larve, for which it searches the trees and shrubs, or darts into the air. It also cats cherries, currants, raspberries, and other fruit. Its nest is built among long grass or nettles, and sometimes in low bushes; it is generally carefully hidden, but has been occasionally found in exposed

situations close to public highways or occupied dwelling-houses. Mr. Jesse discovered one in a vine close to a window. In construction it is slight, but it is well woven and compact; the common catchweed, so plentiful in waste places, or dried stems of grass, and fibrous roots, is usually the material of the exterior, and the lining consists of fine grass, and sometimes a little hair. The eggs, four or five in number, are of a greenish white colour, spotted and speckled with greenish grey and brownish grey. Although the female will desert the nest for very trivial causes before the eggs are laid, she will rarely do so afterwards, especially when the young are hatched; if any person approaches its vicinity, she utters a sharp petulant ery, and flits with great rapidity from bush to bush, with the object of attracting him away. Meyer mentions an instance in which one of these birds effected its purpose by throwing itself down the side of a bank, and then struggling and shuffling along just out of reach, until it had led him a considerable distance from its nest, when it flew away. The fledglings quit the nest very early, sometimes, if in any way disturbed, even before they are able to fly. Three broods are not unfrequently reared in a season, the first being fledged about the end of May. The plumage of the young is of a uniform reddish brown on the upper parts, and greyish white on the under.

The adult male is of a slender and elegant form, but appears rather stouter than it really is from its habit of swelling out its plumage. It is a little over five and a half inches in length, and weighs about four drachms. The upper mandible is dusky brown, the lower pale yellowish brown, darker at the point, and the corners of the month yellowish green. The irides are hazel; the legs and toes pale brown, and the claws dusky brown. The head and neck are brownish grey; the back of the same colour, but paler; the tail dusky brown, with a nearly white feather on each side. The wings are reddish brown, edged with ehesnut; the chin and throat silvery white, slightly tinged with grey; the breast dull white, tinged with rose-colour on the upper part, and greyish below.

The female is somewhat smaller, of a duller colour, and without the rose tint on the breast; the throat and feathers on the edges of the tail are not so white.

THE LESSER WHITETHROAT,

(Sytria sylviella.)

PLATS VII .- FIGURE VI.

In form and habits the Lesser Whitethroat closely resembles the species last described, but it is a little smaller and slighter. It makes its home in all the temperate and southern countries of Europe, and is one of the commonest hedge birds in Germany. In these parts, however, it is only a summer resident, leaving even the warm and sunny climate of Genoa and Italy in September. M. Temminek states that it is abundant in many parts of Asia.

This species which goes by the names of the White-breasted Warbler, the Babbling Warbler, and the Babillard, arrives in the south of England about the third week in April, and spreads over the eastern and midland counties, a few individuals only reaching the extreme north. In the districts surrounding London it is moderately abundant, and has been observed in Norfolk, Suffolk, Cambridgeshire, Lincolnshire, Derbyshire, Yorkshire, and Durham. It has also been noticed in Hampshire, Wiltshire, Gloncestershire, and Somersetshire, but in Cornwall and Wales it is very rare. In Scotland it visits Renfrewshire, Lanarkshire, Haddingtonshire, and Ayrshire, and has been met with near Edinburgh, where, however, it is extremely uncommon. It has never been observed in Ireland, the Orkney Isles, or the Hebrides.

The favourite resorts of the Lesser Whitethroat are thick hedges, copses, thickets, orchards, and gardens, but especially the latter, where it feeds on the cherries, currants, and other fruit, and also the caterpillars and numerous insects which infest such places. These birds have been observed in wheat fields, clinging to the stalks, and pecking the insects from the ears; they have sometimes been caught with their beaks filled with the black aphides which attack the bean. It is not easy to obtain a good view of this little Warbler, as it is of very shy and retiring habits. "When you approach its haunts," writes Mr. Hepburn, "it conceals itself in the thickest shade, where it utters its alarm note. One day in July, when lying in wait for Wood Pigeons beneath the shade of some hedge-row trees, I observed one sporting

among the hawthorn twigs. He once sprung into the air, caught an insect, and then began to sing in a very low voice, ending in a very shrill tremulous cry. The little fellow ceased his song when he observed me, and sought the middle of the hedge, where he remained till I left my place." Master Whitethroat is of a very irritable and pugnacious disposition, he has been seen to attack and drive away much larger birds than himself. In Germany he is called the Little Miller, from the resemblance some of his notes bear to the noise of a mill—"Klap, klap!" His whole song is not very sweet or varied, it is rather low, except the last shake, which is loud and shrill.

The nest of this bird is very slightly constructed of dry stalks of grass with occasionally a little wool or hair intermingled, the lining consists of small fibrous roots and hair. It is generally placed in the lower part of a hedge, but rarely in a nettle bed, like that of its larger namesake. The eggs are laid on or about the 20th of May, and are hatched in twelve or fourteen days; they number four or five, and are of a greenish white colour, spotted, chiefly at the larger end, with ash grey and light brown. Two and sometimes three broods are reared in a season. Bechstein remarks,—"the affection of the Babillard for its young, like that of all its genus, is so great, that as soon as anyone comes near the nest, the sitting bird drops out as if senseless, and flutters helplessly upon the ground, uttering an anxious twitter."

As we have stated, this bird closely resembles the common White-throat in plumage; the principal difference is in the wings, which have less of the red tint about them. The total length of the male is from five to five and a quarter inches, the female is a trifle smaller.

IN CONFINEMENT.

It is sometimes difficult to obtain a good Nightingale, by which we mean of course a bird that will sing well in confinement; any one desiring to make such a purchase is very likely to be imposed on by the dealers unless thoroughly well acquainted with the appearance and manners of this charming songster. If all our readers were of the same opinion with ourselves any information respecting the eaging of Nightingales, and a great many other birds, would be valueless, but as there are probably some who sincerely believe that such creatures may be happy in confinement, if well cared for and attended to, we will give the best information on the subject that can be obtained from



WARBLERS

1. Nightin_ale. 2. Blackcap.

3. Orphean Warbier. 4. Garden Warbier. 5. Akitethroat. 6. Lesser Whitethroat.



Beehstein, Sweet, and other experienced keepers of feathered pets. First as to purchase; -mind a Redstart is not palmed off on you as a Nighting de, as this is a trick often practised by dishonest dealers. The chief differences between the two birds are these:-The Redstart is smaller, and the general colour darker than the Nightingale; its tail is of a lighter colour, and longer. The Nightingale has a prouder and more dignified carriage than the Redstart, he holds his head more erect, and has a peculiar, deliberate manner of hopping, as if he were conscious of his importance. "If anything attracts his attention, he generally looks at it with only one eye; if he catches sight of an insect, he does indeed hop quickly to the spot, yet does not seize it greedily like other birds, but stands over it a moment, as if in consideration." It is a difficult matter to distinguish the male Nightingale from the female, indeed none but an experienced birdfancier is able to do so. The chief differences are, the legs of the latter are shorter, her eyes smaller and less bright, her head rounder, and neck shorter. From five shillings to seven and sixpence is the price commonly asked for an adult Nightingale at the bird marts of Whitechapel or Seven Dials; it is, however, by no means safe to purchase a bird unless it has been heard to sing several times; even this is no great security, for these birds when first taken will sing fiercely and almost unceasingly till they drop down dead with exhaustion.

Should any of our readers come into possession of a freshly-caught Nightingale, that has not passed through the hands of the dealers, they cannot probably do better than follow the practice pursued by the Whitechapel bird-catchers, as detailed by William Kidd, of Hammersmith, a well-known and enthusiastic lover of song birds, in the "Gardeners' Chronicle." He says,-"Some fresh raw beef is scraped, and being divested of all fibrous substance, it is mixed into a soft paste, with cold water and hard-boiled yolk of egg. put into a large bird-pan. In the middle of this food is placed a very small inverted liquor glass, with the stem broken off. Under this glass are introduced three or four lively mealworms, whose oftrepeated endeavours to break out of prison attract the attention of the Nightingale. Not understanding how these worms are placed beyond his reach, he continues to peck at them, until by degrees he tastes the beef and egg, which is artfully rubbed over the sides of the glass. This being palatable, he satiates his appetite with it, and soon feels a zest for it-particularly as his attempts to get at the mealworms always prove abortive. He now eats regularly; he is what is called 'meated off.'" If Nightingales are taken young there is little chance of rearing them, and even should they survive, they are not

likely to sing well unless placed under the tuition of adult birds of the same species.

And now, supposing a bird to have been obtained, and to some extent reconciled to confinement, our readers will wish to know the form of cage best adapted for his dwelling-place, and also the nature of the food on which he is most likely to thrive. With regard to the first, it should be roomy, with a close back, and a green baize roof; the perches should be covered with cloth, or some other soft material, as the feet of this bird are very tender. As for its food, the paste alluded to may form its regular diet, but it should also have a constant supply of ants' eggs or mealworms, especially in the summer. Bechstein says no one should keep a Nightingale who cannot command a supply of the former; if fresh eggs cannot be obtained, dry ones will answer the purpose, and should be mixed with Swedish turnips, and bullock's heart, boiled, dried, and grated small. Fresh water must be placed in the cage daily, not only for the bird to drink, but also for him to bathe in; the floor must, however, never be allowed to remain wet, or his feet will be injured.

The Blackcap thrives much better in confinement than the Nightingale; it will sing through the greater part of the year, and soon becomes very tame and familiar. It should be fed on bruised hemp-seed and bread mixed into a paste, but to keep it in perfect health it is necessary that berries or fruit of some sort be frequently given it. Insects of any kind that can be procured should be placed in its cage as often as possible. Although Blackcaps have sometimes been kept for twelve or fourteen years in confinement, they do not often live nearly so long, generally dying of decline. If any symptoms of this malady appear, they should be fed almost entirely on ants' eggs and mealworms, and an iron nail should be allowed to remain in the vessel from which they drink.

The Garden Warbler should be treated in the manner described for the Blackcap, but it is a delicate bird, and rarely lives in confinement for more than three or four years.

The Whitethroat will feed on the paste of bruised hemp-seed, bread, and raw lean meat, but it requires a frequent supply of insects, and keeps in better health during the summer and antumn if occasionally indulged with fruit. A constant supply of fine gravel should be kept in its cage, and also plenty of fresh water, as it is very fond of bathing.

The Lesser Whitethroat is worth keeping in confinement, as it becomes remarkably tame and attached to the person that feeds it; it must have a plentiful supply of ants' eggs and mealworms, as well as the pasto of hemp-seed, etc., and will then live for several years.

WARBLERS.

(CONTINUED.)

A LTHOUGH the birds in this group vary considerably both in form and size, they have certain characteristics in common, and all belong the family Sylviance. The Wood and Willow Warblers, and the Chiff Chaff, are placed by Macgillivray in the genus Phyllopneuste, and are called Wood Wrens; they are of small size and slender build, only differing from the Sylviæ, to which most of the birds in our last group belong, in having more attenuated bills and feet. Their favourite resorts are wooded districts, especially those in the neighbourhood of water. Here they may be seen actively searching the branches or the ground for insects and worms, on which they entirely subsist. They are only summer residents in this country, arriving about the middle or end of April, and departing in September. Their flight is rapid and undulating, but usually short, and they sing sweetly and melodiously. The Dartford Warbler, which belongs to the genus Melizophilus, is net uncommon in some few localities in the south of England, where it remains throughout the year. It has a remarkably elongated tail, and both in form and habits very much resembles the Whitethroat.

Next we have the Wren, a charming little creature, common all over the country, and universally admired and beloved. It is the only British representative of the genus *Anorthura*, and is remarkable for its round compact little body and turned up tail; its bill is long,

slender, and tapering, and its wings short. In hedgerows, woods, and gardens, little Kitty Wren may be seen hopping busily about among the branches, or taking short, but swift flights, in her search for insects, seeds, and soft fruits. Of her nest, which is built in some sheltered spot, such as the recess overhung by a bank, a hole in a wall, or a crevice among stones, Wordsworth says:—

"Among the dwellings framed by birds,
In field or forest, with nice care,
Is none that with the little Wren's
In snugness may compare.

So warm, so beautiful withal,
In perfect fitness for its aim,
That to the kind by special grace
Their instinct's surely come."

In this elegant structure she lays four or five pale yellowish brown eggs. Her song is sweet, full, and wonderfully loud in proportion to her size.

The beautiful little creatures known as Golderest and Firecrest are near relatives of the Wren's; they are remarkable for their small size, and the brilliant tuft of silky yellow feathers on their heads, which, from its resemblance to a golden crown, has given them the scientific title of Reguli, or Kinglets. Their bills are short, straight, and slender, their wings and tails of moderate length, and their legs and claws long. The Golderests are the smallest of British birds, but among the most lively and interesting. They are permanent residents in this country, and are always found in large flocks. But a few specimens of the Firecrest have been met with in England, although it is a common bird in some parts of the Continent. Both these species inhabit woods and thickets, moving with great agility among the branches, in pursuit of the insects on which they entirely subsist.



WARBLERS.

1. Wood Warbler. 2. Willow Warbler. 5. Chiff-Chaff. 4. Dartford Warbler. 5. Wren. 6. Goldcrest. 7. Firecrest.



THE WOOD WARBLER,

(Sylvia sylvicola)

PLATE VIII. - FIGURE I.

THE Wood Warbler, sometimes called the Yellow Warbler, or the Yellow Wood Wren, is one of the most graceful and elegant of our British species. As its scientific namo indicates, it is a dweller in woods and plantations, although it may occasionally be seen in sheltered gardens and shrubberies. It frequents lofty trees, especially oaks and beeches, and even in places where it is most abundant, usually confines itself to some spot of limited area—a special corner of a wood, or a particular clump of trees. The males arrive in the south of England at the end of April, or the beginning of May, and the females a week or ten days later. A large number take up their residence in the counties along the southern coast, and others find their way into Norfolk, Suffolk. Derbyshire, and Durham. Mr. Selby states that they arrive in Northumberland just as the oak and elm are bursting into leaf. They also visit Wales and Scotland, but have not been observed in Ireland. This species is included by M. Nilsson among the summer visitors to Sweden, but is rare in the northern parts of Europe generally; it is not uncommon in Germany, Holland, France, and Italy, departing from the latter country about the end of September, and passing the winter, according to S. Savi, in Africa and Asia.

There is little difficulty in observing the habits of the Wood Warbler, as he is by no means shy, and admits of a very near approach. He is very lively and restless, hopping nimbly among the branches of the oaks and beeches, and gliding about amid the leaves with wonderful dexterity, as he searches for his insect food. He often attracts attention by his peculiar note, likened by Mr. Blyth to the syllables Twit, twit, twit, tit, tit, tit, tit-ti-i-i-i, beginning slow, but gradually becoming quicker, until it dies away in a kind of thrill." While uttering it, the little Warbler may be seen perched on a lofty bough, with inflated throat, beak pointed upwards, and the feathers of the head

and neck erect; his wings droop and quiver violently, and he seems greatly excited. Sweet says, from this peculiar motion of the wings, the little creature was known in the neighbourhood of Bristol, when he was a boy, as the "shaking bird of the wood." The notes are sweet and pleasing, although without much variety; they have a curious hissing trill running through them, that has given this bird, with some authors, the scientific name of sibilatrix. The song, which is sometimes uttered on the wing, is continued through the greater part of the summer, and can be heard at a considerable distance. While the bird has a family to attend to, his only note is a simple and rather mournful tweet.

The nest of the Wood Warbler is oval, and domed over, with the entrance in the side. It is placed on the ground amongst herbage or bushes, but usually in some spot where the sunshine can penetrate and dispel the damp and gloomy atmosphere which would otherwise surround it. It is constructed of dry grass, leaves, and moss, and lined with finer grass and hair, but never with feathers; the absence of the latter enables it to be at once distinguished from the nest of either the Willow Warbler or the Chiff Chaff, which it otherwise closely resembles. The eggs are six, or sometimes seven in number, spotted and speckled all over with dark purple, red, and grey, on a white ground; the markings are so thick on some specimens that the ground is almost hidden.

This bird is of great service to man, and its visits should be encouraged by the gardener and agriculturist, for while it destroys immense numbers of insects and their larvæ, it never touches fruit or berries. It hunts among the leaves for caterpillars, and darts with a rapid and undulating flight in pursuit of butterflies, and other denizens of the air.

The Wood Warbler is of very elegant form and handsome plumage. The wings are long, and the tail slightly forked. The males and females differ little either in size or colour; both are from five to five and a quarter inches in length, and weigh nearly three drachms. The irides are hazel; the beak blackish brown, but lighter in colour along the edges of the mandibles. The general tint of the head and upper parts of the body is yellowish green; a streak of sulphur yellow passes from the base of the upper mandible over the eye; under it, before and behind the eye, is a brown line. The chin, throat, and breast are delicate sulphur yellow, fading into pure white on the under parts of the body. The wings are dusky brown, most of the feathers edged with yellowish green; the tail greyish brown, the outer edges of the feathers yellow, except the side ones, which are edged with pale brown

The legs, toes, and claws, are greenish brown. Towards the end of the season the yellow edgings of the feathers of the wings and tail disappear, and the white extends higher up the breast. The young, when completely fledged, resemble their parents, but are of a rather paler colour; they retain their first plumage until they migrate.

THE WILLOW WARBLER,

(Sylvia trochilus.)

PLATE VIII. - FIGURE II.

This lively and elegant little Warbler very closely resembles the species last described, but it is a little smaller, and of a darker and more dingy colour; its wings are shorter, its legs of a yellower tint, and the streak over the eye narrower and less bright. The differences are, however, so slight that Macgillivray says "a person not having before him specimens of both, would find some difficulty in determining to which of the two species an individual of either belonged." Its scientific name trochilus signifies a Wren, and it is very commonly called the Willow Wren; it is also known as the Yellow Warbler, the Hay Bird, and Huck-Muck.

This bird is one of the earliest of our summer visitors, arriving on the southern coast towards the end of March or the beginning of April. From that time until the end of September it is plentiful in the southern and eastern counties-Kent, Sussex, Hants, Wilts, Dorset, Essex, Suffolk, Norfolk, Derbyshire, Yorkshire, Durham, and Northumberland. Although Montagu stated that it did not visit Devonshire or Cornwall at the period at which he wrote, of late years it has been observed in both these counties, and also in Wales. It is abundant in many parts of Ireland, and in Scotland is plentiful about Tongue, Laing, and Loch Naver, Loch Assynt, Leith Water, Currie, Slateford, Edinburgh, and the Pentland Hills. Several specimens have been seen in the Orkney Isles, but it does not appear to visit the Shetland Isles, or the Hebrides. It is a regular summer resident in most parts of the continent of Europe, from Russia and Norway to Italy. Mr. Strickland has noticed it in Persia, and Mr. Gould has received specimens from the western portions of India; it is also found in North America.

This bird is much more abundant than the preceding species, and

does not exhibit the same partiality to lofty trees; its favourite resorts are woods, plantations, shrubberies, and hedgerows, but especially places on the borders of streams, where the alder, the willow, and the osier flourish. It may also be seen on open commons covered with furze bushes and brambles, and semetimes visits gardens and orchards.

The little Willow Warbler is not at all shy or timid, and will allow an observer to come within a few yards of him without attempting to fly away or to hide himself; indeed he semetimes advances towards the intruder on his haunts in a most daring and impudent manner, frisking about on the branches, and flitting in and out amid the leaves, as if he wished to exhibit his agility, and, as Mr. Morris remarks, "seeming to think that his diminutive size or conscious innocence is a guarantee for his safe security from molestation or injury." This interesting little bird may be often seen on the fruit trees, gliding about among the branches with wonderful rapidity, but he is only searching for flies, aphides, and other insects, and will not partake of the fruit. If any other bird intrudes upon his preserves he immediately shows fight, and will not rest until his feathered enemy is driven away. Even the young have been observed to exhibit the same pugnacious disposition.

The song of the Willow Warbler is soft, mellow, and very sweet and pleasing. Mr. Stevenson says, "On a bright sunny morning in the early spring, when the trees are putting forth their freshest green, and all is life and animation amongst the feathered throng, it is one of the most delightful and cheering sounds of that tuneful season. If we walk through any large plantation on the first arrival of these birds, the whole place seems alive with their merry notes, and as we trace the sound into the tepmost branches, nearly every other tree seems to have a separate vecalist, whose song, commencing in a high key, runs down the scale with the most charming modulations." The bird sometimes utters this delightful warble when flying from tree to tree, as well as when perched on the branches; he may be heard at a distance of six hundred yards, or even more. Towards the end of July the song begins to decrease in strength; at the close of the season it is very low and subdued, and only occasionally uttered. The ordinary call-note is a short shrill "cheep."

Bishop Mant, who was an ardent lover of nature, and an enthusiastic admirer of all 'the birds of the air,' gives the following charming lines respecting this bird:—

"Where the gay sallow's bursting down Is gilt with many a golden crown, Fain would I now, in rival gold His slender form attired, behold The willow-haunting Wren, and hear His plaintive wood-notes, warbled clear As on the breath of morning floats The music of his hymn-like notes."

The nest of the Willow Warbler is, as we have stated, similar in construction and materials to that of the species last described, except that it is lined with feathers; it is very large for the size of the bird, and is usually built on the ground, among tall grass, weeds, or brushwood; one has been met with, however, in the ivy on a wall. The eggs, from four to seven in number, are generally of a light pinkish white, thickly spotted with pale rusty rod, but they vary greatly in colour, some have been found very sparingly spotted, and others pure white. The female sits very close and exhibits a wonderful attachment to her nest, not even deserting it after it has been much disturbed or meddled with; a curious instance is thus recorded in the "Field Naturalist" by a lady. "In the spring of 1832, walking through an orehard, I was attracted by something on the ground in the form of a large ball, and composed of dried grass. I took it up in my hands, and upon examination found it was a domed nest of the Willow Wren. Concerned at my precipitation, I put it down again as near the same place as I could suppose, but with very little hope that the architect would ever claim it again after such an attack. I was, however, agreeably surprised to find, next day, that the little occupier was still proceeding with its work. The feathers inside were increased, as I could perceive by the alteration in colour. In a few days, two eggs were laid, and I thought my little protégé safe from harm, when a flock of ducks, that had strayed from the poultry yard, with their usual curiosity, went straight to the nest, and with their bills spread it quite open, displaced the eggs, and made the nest a complete ruin. I now despaired; but immediately on driving the authors of the mischief away, I tried to restore the nest to something like its proper form, and placed the eggs inside. The same day I was astonished to find an addition of another egg; and in about a week four more. The bird sat, and ultimately brought out seven young ones; but I cannot help supposing it a singular instance of attachment and confidence, after being twice so rudely disturbed."

THE CHIFF CHAFF,

(Sylvia hippolais.)

PLATE VIII. - FIGURE III.

THE Chiff Chaff differs but little in appearance from the two preceding species, but is a little smaller than either, and seems to stand intermediate between them and the Reguli or Kinglets, next to be described. From the other Wood Wrens, it may readily be distinguished by its shorter wings, the darker colour of its legs and feet, and the browner tints of its plumage. It is, with the exception of the Wheatear, the first to visit us in spring and the last to depart in autumn, having been seen as early as the 12th. of March, and as late as the middle of October. A few individuals have been known to remain in the southern counties throughout the winter; Montagu speaks of two that were seen in his garden about Christmas, and a specimen was shot near Newhaven, in January, 1836. It sometimes goes by the names of the Lesser Pettychaps, and the Least Willow Wren; Macgillivray calls it the Short-winged Wood Wren, and, like the species last described, it is known in some localities as the Hay Bird. Although nowhere so abundant as the Willow Warbler, this bird is found in all the southern counties, from Sussex to Cornwall; it has also been observed in Essex, Norfolk, Westmoreland, Derbyshire, Yorkshire, Durham, and Northumberland. It visits some parts of Scotland, but in the neighbourhood of Edinburgh is stated to be very rare; a specimen was killed in Orkney in November, 1850. It has also been observed in Wales and Ireland. On the European continent it is common in the countries bordering on the Mediterranean, remaining in Italy throughout the winter: Mr. Hewitson also found it in Norway. In Asia Minor, Mr. Strickland saw some individuals at Smyrna, in the month of November.

The little Chiff Chaff makes its home in woods, coppies, hedgerows, and gardens, and may often be seen in the recd and osier beds on the borders of rivers. Like the Wood Warbler, it is very partial to tall oaks, beeches, and firs, running about among the branches with the same reckless activity in its search after insects and their larva. It constantly emits the peculiar double note from which it derives its common name. This, however, is said by Macgillivray to resemble

more closely the syllables "cheep, cheep," than the "chiff, chaff," usually attributed to it, as it is sharp and shrill. When alarmed its cry is quite different, and is best represented, according to Meyer, by the word "hoo-id." The song, which is either delivered from the top of a lefty tree, or while the little creature is on the wing, is sweet, melodious, and varied.

The nest is arched over, and has the aperture near the top; it very much resembles that of the Willow Warbler, but is not so neatly constructed. The materials vary according to the situation in which it is placed-grasses, leaves, fern, and moss, intermingled with the bark of the birch tree, wool, the down of flowers, and the shells of chrysalides. with feathers or hairs for the interior lining. It is generally placed on the ground among brambles, furze, or other bushes, but sometimes raised a little among the branches, or in the moss-clad stump of a tree. Mr. Henry Doubleday found one at a height of two feet in a dead fern, and Mr. Hewitson mentions another which was built in some ivy against a wall, at an equal elevation. From five to seven eggs are laid towards the middle or end of May, and hatched in about thirteen days, they are particularly large at one end, and small and pointed at the other. of a white ground colour, and spotted sparingly with blackish red or purple brown. Two broods are reared in a season. The young when tledged very nearly resemble the adults, but the yellow and green tints are a little brighter, and the bill, legs, and feet of a paler brown.

Sweet says these birds render much service to man in devouring the caterpillars of the different species of Tortrix, that are rolled up in the unfolding buds of various trees, and would otherwise destroy a great part of the fruit. They feed also on aphides, flies, and moths.

The scientific name, hippolais, means a Hedge Sparrow, and has been applied to this bird by British ornithologists, while continental authors term it Sylvia rufa.

THE DARTFORD WARBLER,

(Sylvia provincialis.)

PLATE VIII .- FIGURE IV.

This bird, also called the Provence Furzeling and the Furze Wren, is not uncommon on the European continent in Spain, Italy, and the south of France. The first specimens found in this country were obtained

at Boxley Heath, near Dartford, in Kent, in the year 1773, and it thence derived its English name. Dr. Latham, to whom its discovery was communicated, made it known to Pennant, who described it in his "British Zoology," published in 1776. Since that time it has been frequently met with on furzy commons in Kent, Surrey, Middlesex, Devonshire, Sussex, Cornwall, Hampshire, Worcestershire, Leicestershire, Staffordshire, and Norfolk. It appears to remain in this country throughout the year, as Gould states that he has obtained specimens at all seasons, and Rennie has seen it as early as the end of February.

The Dartford Warbler is about the size of the Chiff Chaff, but it is of slenderer build and has a much longer tail. In its habits it is very shy and timid, concealing itself in the thickest furze on the slightest alarm. Even in those places where it is most abundant it can be rarely seen, unless driven from its retreats, as it sometimes is, by the dogs engaged in rabbit or fox hunting; it then rises above the bushes in a short jerky flight, but soon perches and conceals itself again.

The song, which was heard by Rennie so early as the end of February, is described as weak and shrill, but often repeated; it is uttered while the bird is perched on the topmost twig of a bush, or hovering above it in the manner of the Whitethroat and Whinehat. It is sometimes continued for half an hour at a time. The common note resembles the syllables 'cha, cha, cha,' or 'tscha, tscha, tscha.'

The nest, which is of slight and flimsy construction, is usually placed in a furze bush, at a height of about two feet from the ground. It is built of dry stalks of grass and pieces of furze, with sometimes a small quantity of wool interwoven, and has a thin lining of finer grass. The eggs are greenish white, speckled with olive brown and grey; towards the larger end the markings run together and form a sort of zone. Two broods appear to be reared in each season, the first early in May, and the second about the end of July.

The food of this Warbler consists principally of small insects, which it frequently captures on the wing, making swift darts from the top of a hedge or bush, and immediately returning to its station.

The adult male is a little over five inches in length. The beak is nearly black, particularly towards the point, the edges of the upper mandible, and base of the lower reddish yellow. The head and neck are greyish black; the throat and breast chesnut brown, and the under surface of the body white. The back is blackish grey or brown tinged with olive; the tail, which is wedge-shaped, is also blackish brown, the feathers edged with pale brown. The legs and toes are pale reddish brown, and the claws darker brown; the irides reddish yellow. The female resembles the male, but has the tints lighter, and the throat

faintly streaked with white. The young are similar to the adults, except that the irides are of a paler colour.

THE WREN,

(Sylvia troglodytes.)

PLATE VIII. FIGURE V.

For the Nightingale our feelings are those of unqualified admiration, and, we might almost say, respect, for the marvellous perfection of its vocal powers, but for little Jenny Wren we have a strong and lively affection, not for any gifts that she possesses above other of our feathered friends, but for herself, her familiar habits and merry antics; she is essentially a good-tempered, genial little body, visiting our gardens and gamboling before our eyes, not darting away and concealing herself as soon as we approach, in the manner of most birds, but exhibiting an amount of confidence that wins our hearts, and renders it impossible for us to molest or injure her. Even in our early childhood she enlisted our sympathies, and with Cock Robin shared the first place in our affections of all the heroes or heroines of nursery literature.

"The little woodland dwarf," as Graham appropriately calls this universal favourite, is common from one end of England to the other. It is likewise known in Wales, Ireland, Scotland, and the Orkney and Shetland Isles. On the continent of Europe, it is more abundant in the northern than in the southern and central parts, even visiting the wild and desolate shores of Iceland and Greenland. It has also been seen at Smyrna, and specimens have been received by the Zoological Society from Trebizond. It has received the specific title of troglodytes from its habit of hiding in caves or holes, in the manner of the people of that name mentioned in ancient history. Its favourite resorts are lanes and hedgerows, thickets, gardens, and orchards, and it may often be met with along stone walls, and among fragments of rocks. It remains in this country throughout the year, especially frequenting the vicinity of houses, both in town and country, during the winter months. The song of this interesting little bird may be heard at all seasons, even during the coldest weather, when the only other songster who braves the frost and snow is "the household bird with the red stomacher." Graham says,-

"Amid the leafless thorn the merry Wren,
When icides hang dripping from the rock,
Pipes her perennial lay; even when the flakes
Broad on her pinions fall, she lightly flies
Athwart the shower, and sings upon the wing."

In the summer, when the woods ring with the many and varied strains of other birds, the pipe of the tiny Wren does not attract attention, but when nearly all the other sylvan choristers are silent, its sweet and lively, although somewhat shrill song, is most welcome. The little singer generally utters his music from the upper branches of a hedge or bush; he stands with raised head, expanded throat, and drooping wings, and hops from his perch as soon as he has finished his performance. His voice is of wonderful power in proportion to his size. Mr. W. Thompson says, "On the yard wall before my window in the country, a Wren once appeared on the 23rd, of September, singing with such extraordinary loudness as immediately to attract other birds to the spot. First came a Hedge Sparrow to buffet it, followed by a male and female Chaffineh, also with sinister intent, but it maintained its position against them all, and sang away as fiercely as ever. A Robin too alighted beside the songster, but, unlike the others, did not seek to disturb it. For this strange proceeding on the part of the Wren there was no apparent cause. When a bird of prey appears, the little Wren often gives the alarm, by nttering rapidly its note of fear, shrek! shrek! so quickly repeated that it sounds like a miniature watchman's rattle; this is usually accompanied with a curtseying or dipping motion in the manner of the Redbreast."

This bird is extremely lively and restless, it scarcely remains in one position for a moment, hopping from one branch to another with fluttering wings and elevated tail, or taking little frisking flights at a short distance from the surface of the ground. It will allow anyone to approach very close without taking alarm, but if it fancies any harm is intended, off it darts into the nearest hedge, and its diminutive form is soon lost amid the foliage.

The nest of the Wren, which is built early in spring, varies very much both in form and materials. Montagu says, "The materials are generally adapted to the place; if built against the side of a hay rick, it is composed of hay; if built against the side of a tree covered with white moss, it is made of that material, and with green moss if against a tree covered with the same, or in a bank. Thus instinct directs it for security." Mr. Hewitson mentions one built against a clover stack, and formed entirely of clover; and Mr. Jesse

states in his "Gleanings," that he has one in his possession, built amongst some lifter thrown into a yard, which so nearly resembled the surrounding objects that it was only discovered by the birds flying out of it. The nest is very large in proportion to the size of the bird, generally of a spherical shape, flattened on the side next the substance against which it is placed, and having the aperture at one end or in the side. But this form is not always adhered to; Mr. Thompson, of Belfast, mentions one that was not at all dome-shaped. It was placed in a hole of a wall inside a house, the only entranco being through a broken pane of the window; and another built in a bunch of herbs hanging to the beams of an outhouse, which was formed entirely of the herbs, twisted and matted together. We might quote hundreds of accounts of the curious places chosen by this bird in which to construct her nest, and the almost endless variety in both form and materials; how one was built in the deserted nest of a Thrush, another in the newly finished nest of a Martin, and another again in an old bonnet fixed up among somo peas to frighten away birds; but they all go to prove that little Jenny is not at all particular, and is ready to build in any corner that presents itself, and to make use of the materials that are close at hand. The eggs are usually from seven to ten in number, but as many as fourteen have been found; they are generally white with crimson spots, but are sometimes without spots; the shell is very thin and smooth. During incubation, which lasts ten or twelve days, the male feeds the female on the nest. The young are said to lodge for some time in their place of birth after being fledged.

The male is a little over four inches in length, and weighs about two drachms and three quarters; the beak is long and slender, the npper mandible dark brown, the lower paler, and dark only at the point; the irides hazel. The head, neck, and back are reddish brown, barred transversely with narrow streaks of dark brown. The chin, throat, and breast are greyish buff, the latter brownish at the sides and lower parts. The wings are reddish brown, barred with darker brown, and the quills are barred alternately with dark brown and black; the npper wing coverts are spotted with white. The legs, toes, and claws are light brown. The female is rather smaller than the male, of a redder colour, and has the transverse bars less distinct.

THE GOLDCREST,

(Regulus cristatus.)

PLATE VIII. - FIGURE VI.

The little crested or crowned king is the meaning of the specific name of this, the smallest of our British birds. He has been sometimes called the English Humming Bird, a title most appropriate, both on account of his tiny and delicate form and exquisite plumage. Although plentiful in almost all parts of the British Isles, the Golden-Crested Wren, as he is frequently named, often escapes observation in consequence of his small size; his favourite haunts are fir woods or plantations, but he may be also met with among oaks, birches, and other trees. He is extremely active, and may be seen hopping and running about among the branches with wonderful rapidity, or clinging by means of his long sharp claws in all kinds of queer positions, sometimes even hanging head downwards; in fact he is a very acrobat among birds, and his performance forms one of the prettiest and most amusing sights the rural rambler can behold. Where one of these little creatures is seen many others are sure to be found, as they keep in large flocks even during the breeding season. Like children they would be miscrable without companions, and they seem to spend their lives in a perpetual game of hide and seek amongst the branches, exhibiting just the same spirit of fun and merriment that we see in the lively romps of our own dear little ones. There is no difficulty in watching the funny antics of the tiny Goldcrests, as they are by no means shy or timid, and will allow an observer to approach quite close without attempting to fly away or hide themselves; even when a shot is fired amongst them, those that are uninjured exhibit but little alarm. They appear to live together in the most perfect amity, never interfering or quarreling with each other, except at the commencement of the breeding season, when, sad to say, terrible battles sometimes take place between the males. An account of one of these fights is thus given in the pages of "The Naturalist:"—"In the garden of F. Barlow, Esq., of Cambridge, in 1849, two Golden-crested Wrens were engaged in direful contest; a female sitting on a tree near them. They fell to the ground fighting, heedless of the gardener standing close to them, who placed



WABLERS

1. Wood Warbler. 2. Wil' - Warbler.

3. C itf Chaff 4. Lartford Warb er. 5. Wren

6. Coldcrest. 7. Firecrest.



his hands over them, and took them into custody, carried them into the house, and imprisoned them under a wire meat-cover. One soon died, when the other perched upon him, pecked him, and endeavoured to draw him round his prison. Shortly after, the conqueror shewed signs of exhaustion, was taken out and placed near an open window, but died also. The female selected a mate, and built her nest over the spot where the battle was fought."

The Golden-crests frequently associate with birds of other species; they have been seen in company with Titmice and Creepers, foraging the woods in parties of several dozens, all together, as one family.

These birds remain with us throughout the year, but their numbers are much swelled in winter by the arrival of large flocks from colder climates. It seems singular that such diminutive and delicate creatures should be able to travel across wide extents of sea during the often boisterous weather of autumn, but such is the indisputable fact; many doubtless perish, and others reach the shore in an utterly exhausted condition. Mr. Selby speaks of an immense flock that arrived on the coasts of Northumberland and Durham in October, 1822, after a severe north-east gale, and expresses his opinion that they came from the pine forests of Norway and Sweden. In further confirmation of this curious fact, Mr. Stevenson, in the "Birds of Norfolk," quotes from a letter from Capt. Longe, of Great Yarmouth, as follows:-"As I was walking to Hemsby, about 7-30 on the morning of the 2nd. of November, 1862, about half a mile from Yarmouth on the Caister road, my attention was attracted to a small bush overlanging the marsh dyke, which borders the pathway, by the continuous twittering of a small bird. On looking closely I found the bush, small as it was, literally covered with Golden-crested Wrens; there was hardly an inch of twig that had not a bird on it. I went the next morning to look for them, but they were all gone. The wind had been easterly, with much fog."

The song of the Golderest is very sweet and melodious, but so soft that it cannot be heard unless the listener is quite close. He generally delivers it when perched on a bush or hovering above it, but sometimes when on the wing. The ordinary note, which he utters constantly when searching for food, is weak and feeble, although rather shrill; it resembles the syllables 'tzit, tzit,' and 'see,' or 'sree.'

The Golderests begin to pair as early as the end of February, and immediately leave open localities and retire to the interior of the fir, larch, or oak woods, where they construct their tiny nests. These they generally suspend to the under surface of the branches, by interweaving the materials of the exterior—moss, wool, or grass—with the projecting twigs; sometimes they are made to rest on the branches immediately underneath. They are frequently lined with feathers, and altogether

form some of the prettiest specimens of bird-architecture to be met with. So closely do they assimilate to the branches to which they are attached, that they are very difficult to discover. The eggs are smaller than those of any other British bird, being not quite half an inch in length. They are usually nearly round, and number from four to ten or eleven; in colour they are brownish or reddish white, darker at the larger end. While the female is sitting she is not easily disturbed, permitting an intruder to almost touch her before she takes to flight. When the young are hatched she is most active in supplying them with food. Colonel Montagu timed one that fed her offspring in a nest which had been taken from its original position, and placed in a room. She visited them about once in every minute and a half or two minutes, or on an average thirty-six times in an hour, and this was continued for full sixteen hours in a day. The male would not venture into the room, but the female was so tame as to continue her maternal duties while the nest was held in the hand. Two broods appear to be reared in each season, the first in March, and the second at the end of May or the beginning of June.

The male Golderest is a little over three and a half inches in length, and weighs from seventy-six to eighty grains. The bill is black, the mouth dusky orange, and the irides are hazel. The crest feathers are bright yellow, tipped with orange, and bordered on each side of the head by a narrow band of black. The general colour of the upper parts is pale yellowish brown, and of the lower light greyish brown. The wing coverts are purple brown, bordered with yellowish green, and tipped with white; the quills and tail feathers dusky, margined with greenish yellow. The legs and feet are brown. The female resembles the male, but is a little smaller, and not so brightly coloured; the crest is lemon yellow. The young are without the yellow on the head, and of a lighter colour than the adults.

THE FIRECREST,

(Regulus ignicapillus.)

PLATE VIII. - FIGURE VII.

Regulus, a little king, ignis fire, and capillus the hair of the head, are the Latin words from which the scientific name of this bird is derived. It is a little larger than the species last described, and "although similar in colonring," says Macgillivray, "is easily distinguished by its two additional dusky bands on each side of the head. Its bill is slightly

longer, and somewhat wider at the base; the tuft of silky feathers on the head is larger, and the tail a little longer."

The Rev. Leonard Jenyns first made the Fircerest known as a British species, having obtained a specimen in his garden at Swaffham Bulbeck, near Cambridge, in the month of August, 1832. It was a young bird, and had probably been reared in the neighbourhood. Since that time others have been observed at Brighton, in Sussex, and one was caught on the rigging of a ship five miles off the coast of Norfolk in the early part of October, 1836. A specimen was also procured at Yarmouth in November, 1843, and another near Durham. Mr. E.H. Rodd, of Penzance, states in the "Zoologist" "that this species frequents that neighbourhood, chiefly at Larrigan Valley, every year about the beginning of December, and that one was killed near Marazion in 1852. In Scotland it is stated to have been met with in Sutherlandshire, but no instances are recorded of its having been found in Wales or Ireland. On the Continent it has been observed in the extensivo forests of Germany, and in Belgium, France, and Switzerland.

Like the Goldcrests, these little birds are of extremely active and restless habits, but they are not nearly so bold, and do not keep in such large flocks. They frequent woods and plantations, appearing to prefer young firs and brushwood to lofty trees. Temminck, who describes this bird as a migratory species in the Belgian provinces, says, "I have never heard the song of the Firecrest, but I can readily distinguish its call-note among a host of the common Goldcrests; it is shorter, not so shrill, and pitched in a different key, that to one well versed in the language of birds it is easily discovered."

The nest is said to be built of moss, wool, and grass, and lined with fur and feathers; it is suspended from the branch of a fir or other tree. A specimen found by M. Vieillot near Rouen contained five eggs, but as many as eight or ten are stated to be sometimes laid. They are generally of a pale reddish yellow tint, minutely speckled with yellowish grey at the larger end, but vary much both in colour and size.

IN CONFINEMENT.

Sweet recommends the Wood Warbler as a very desirable bird to keep in confinement, as it is both elegant in form and plumage, and has a pleasant and singular song. It is best reared if taken when young in the nest, which should be placed in a covered basket nearly

filled with moss. The food given at first should be moist bread and hempseed, mixed with small pieces of raw meat. The fledglings require to be fed several times a day, and a drop of water should be allowed to fall into their mouths occasionally. As they grow older a little gravel should be mixed with their food, to strengthen their bones and prevent cramp. Their diet should afterwards consist of the same paste of bruised hempseed, etc., but should be frequently varied with yolk of egg boiled hard and crumbled, and flies, small moths, aphides, or any other insects that can be procured.

The Willow Warbler may be reared by hand in the same manner, or it may be taken in an adult state, in which latter case it becomes accustomed to the food of the aviary if flies are mixed with it. It is, however, a delicate bird, and must be kept very warm during the winter.

The Chiff Chaff soon becomes very tame in confinement, and will thrive if treated like the previous birds. Mr. Sweet says, "One that I caught soon became so familiar that when out in the room, if a fly was held towards it, it would fly up and take it out of the hand. It was also taught to drink milk out of a tea-spoon, by putting some flies into it; if the spoon was held towards it, and it was called Sylvia, it would fly up and perch on the finger, or on the handle of the spoon and drink the milk." The Dartford Warbler should be managed exactly the same as the other species.

The Wren is a difficult bird to preserve in confinement, Bechstein says he has never succeeded in keeping it alive for more than a year; he recommends that when first caught it be fed on mealworms, flies, and elderberries, by the use of which it may after a time be brought to eat the common paste. The Goldcrest is a charming occupant of an aviary. While he pleases the eye by his small size and beautiful plumage, he delights the ear by his sweet and melodious, though weak song. The Rev. W. Herbert states that he caught half a dozen of these tiny birds at the beginning of winter, and they lived extremely well on egg and meat. At roosting time there was always an amusing conflict among them for inside places, as being the warmest. A severe frost, however, killed all but one in a single night, although they were kept in a furnished drawing-room. Bechstein says they may be fed upon the common paste, but must never be allowed to touch rape or camelina seed, either of which would immediately kill them.

FLYCATCHERS. SWALLOWS, AND BEE-EATER.

THE Flycatchers, which occupy the first place in our present group, are the only British representatives of the Myiotherinæ, an extensive family, of which species are found in all parts of the world. They belong to the genus Muscicapa, and, as their name indicates, subsist entirely on the flies and other insects so abundant in the summer months, during which they are our visitors. These they usually pursue on the wing, darting from the top rail of a feuce or other elevated station, and returning thereto after each capture. They are of sombre plumage and slender build, with tails and bills of moderate length, and longish wings. When at rest they have a rather dull and languid appearance, but their flight is rapid, light, and graceful. Their nests are of moderate size, neatly constructed of straws, grass, moss, and similar materials, and lined with hair or feathers.

The Swift is remarkable for the conformation of its feet, all the toes being pointed forward, and the claws turned inward, in such a manner as to adapt them for clinging, while rendering them unsuitable for walking on a flat surface. This peculiarity has caused some authors to place the bird in a distinct family, but it is usually included in the *Hirundinæ* with the Common Swallow and the Martins, which it otherwise closely resembles. The members of the Swallow tribe are so numerous and widely distributed, that almost everybody is able to

distinguish one species from another, and knows something of their habits. Except the Sand Martin, they all take up their abode close to our habitations, building their nests and rearing their young almost before our eyes. So constantly are they about us, and withal so elegant in appearance and lively in their manners, that we seem to look upon them as a necessary part of summer, and should miss their presence, even as we should miss the flowers from the woods, fields, and hedgerows.

The Bee-eater, a rare visitor to our shores, belongs to the gences *Merops*, and is somewhat similar in its habits to the Swallow, capturing its prey on the wing in the same manner. It is remarkable for its elongated bill, small and feeble feet, and brilliant plumage, resembling in all these particulars the Kingfishers, to which family naturalists have attached it.



FLYCATCHERS SWALLOWS, BEE-EATER.

Piel Flycatcher.
 Spottel Flycatcher.
 Swift.
 Swallow.
 Maitin.
 Sand Martin.
 Bee-cater.



THE PIED FLYCATCHER,

(Muscicapa luctuosa.)

LLATE IX .- FIGURE I.

This species is only a summer resident in Britain, arriving about the middle or end of April, and departing in September. In some few districts in Westmorland, Cumberland, Yorkshire, and Durham it is moderately abundant, and has also been observed in Lancashire, Derbyshire, Worcestershire, and Staffordshire. A few specimens have been met with in most of the southern and south-eastern counties, but as they have generally been seen in the spring, it seems probable that they were individuals on their way to more northern localities; the bird, however, is stated to breed at Horsey and Hickling, in Norfolk. It does not appear to visit Ireland, and is very rare in Scotland; in Wales it has been observed in the county of Denbighshire.

The Pied Flycatcher resembles the Redstart in many of its habits; the two species arrive about the same time, associate together, and sometimes contend for the same hole to build in. A correspondent of the "Magazine of Natural History" states that he once found a dead Redstart in a nest of the former bird, and relates that on one occasion a Redstart having been deprived of her own nest, took possession of that belonging to a Pied Flycatcher, hatched the eggs, and brought up the young. The nest, which is built about the middle of May, is usually placed in a hollow tree, or a hole in a wall at a few feet from the ground, but sometimes it has been found on a branch at a considerable elevation. It is composed of moss, grass, leaves, straw, and bark, and lined with hair and feathers. The eggs, generally five or six in number, are pale greenish blue, or occasionally nearly white. In a nest found by Mr. T. C. Heysham, of Carlisle, they were symmetrically arranged as follows:-"One lay at the bottom, and the remainder were all regularly placed perpendicularly round the side of the nest, with the smaller ends resting upon it, the effect of which was exceedingly beautiful." The parents take turns on the nest, and the young are hatched in about fourteen days.

The song of the Pied Flycatcher is short and little varied, but decidedly pleasing; it is commonly nettered from the branch of a tree, but sometimes when the bird is on the wing. The alarm, which is frequently repeated when any intruder approaches the nest, is said to resemble the word *chuck*.

The food of this bird consists almost entirely of small flies, hence both its English and scientific names, the latter being derived from the Latin words, musca a fly, and capio to catch or take; luctuosa, mourning or sorrowful, is added thereto to indicate its peculiarly sad and melancholy appearance, as it stands on the branch of a bush or tree on the look out for passing insects.

The adult male is about five inches in length, and weighs a little more than three drachms. The bill, feet, and claws are black; the irides hazel. The head is black on the crown, and has a patch of white on the forehead; the head, nape, and back are black; the chin, threat, and breast white, tinged with yellowish brown on the sides. The wings are brownish black, some of the feathers edged and patched with white; the tail also brownish black, partly edged with white. The female is a little smaller, and without the white mark on the forehead; the upper parts are rather browner than those of the male, and the breast is a duller white.

THE SPOTTED FLYCATCHER,

(Muscicapa grisola.)

PLATE IX .- FIGURE II.

This bird does not arrive in England until the middle or end of May, and is therefore one of the latest of our summer visitors. It is common in nearly all parts of the country, but particularly abundant in the southern and midland districts. In Wales and Ireland it is also plentiful, but in Scotland is rather rare. It is distributed over the European Continent as far north as Norway and Sweden, and it is also found in southern and western Africa.

In gardens, orchards, woods, plantations, and shrubberies, this small and rather insignificant-looking bird may frequently be seen perched on the extreme end of a branch, or the top of a post or rail, with a general air of listlessness or dejection, but no sooner does an insect come within range than he shows he is awake and vigilant, by the

rapid manner in which he darts into the air and seizes it, generally returning to the same position to continue his watch. These birds have been accused of helping themselves to raspberries, cherries, and other fruit, but an examination of the stomachs of those killed in orchards and gardens seems to prove that the charge is unfounded, as nothing but insects have been found.

Immediately on their arrival in this country the Spotted Flycatchers commence building operations; the female is believed to be the architect, while the male simply collects the materials. The nest is placed in a variety of situations—a hole in a tree or wall, a rocky ledge, the branch of a fruit tree nailed against a wall, or the beam of a shed or other outbuilding. Although very small, not more than four and a half inches external, and two and a half internal diameter, it is a beautiful structure, and has an immense amount of labour bestowed upon it: it is composed of various materials, twigs, grass, moss, catkins, straws, and fibrous roots, and is lined with hair, wool, down, and feathers, especially those of domestic birds. Yarrell says, "long stems of grass or long horse hairs are interwoven by the bird, fixing in one end, and then traversing the edge of the nest, laying in the remainder as she makes circle after circle. A female has been seen going backward round the upper edge of the nest, arranging the materials which formed the inner lining." In selecting a position for the birth-place of their family, these birds exhibit but little regard to the close vicinity of mankind, and are not easily disturbed or driven from the spot once chosen. A pair built in the hinge of an outhouse door, where people were continually passing and re-passing; another in the angle of a lamp-post in Leeds; and another in the crown of a lamp near Portland Square, in London. More curious still, it is related that at Cuckfield Place, in Sussex, a pair of these birds constructed their nest on the top of a garden hoe hanging on a rail against a wall, beneath a small shelf. Four eggs were laid, upon which the female sat, and notwithstanding she was constantly visited during the time of incubation, in due time the young were hatched. Whenever the hoe was required for use, the nest was taken off and placed on the shelf or the ground, but this did not appear to alarm the old birds, who continued feeding the young and attending to their domestic duties as if nothing had happened; as soon as it was replaced in its original position they would express their gratification by flying round and chirruping forth their joy; thus bringing up their progeny until they were able to leave the nest and provide for themselves. eggs of this bird, four or five in number, are greenish or greyish white, clouded and spotted with pale reddish brown and purplish grey,

the markings are thickest at the larger end. When the young are hatched they are fed with wonderful frequency by the parents; Mr. D. Weir, who went to the trouble of watching a nest during a whole day, states that he saw the old birds bring food to them no less than five hundred and thirty-seven times. After they have quitted the nest they are still fed by their parents, and may sometimes be seen perched in a row on a branch or fence, while the old ones procure them flies. These birds are remarkable for their habit of returning to the same spot year after year; a pair have been known to build their nest in an old wall no less than eight years in succession.

The Spotted Flycatcher is not a gifted songster, indeed in this respect he is not to be compared with his pied relation last described, as his only note is a weak and rather mournful kind of chirp.

In plumage this bird is extremely plain and unattractive. The adult male, which is a little over five and a half inches in length, has the bill dark brown; the irides hazel; the legs, toes, and claws black. The head is brown, with a few darker spots on the crown; the whole upper surface of the body, and the wing coverts, of the same colour, except that the quill and tail feathers are a little darker. The under parts are dull white, with the throat and breast spotted and streaked with brown. The female is a little smaller, but otherwise can scarcely be distinguished from the male. The young, when fully fledged, have each brown feather tipped with buff, so that they present a very spotted appearance.

To the wide distribution of this species, its abundance, and familiar habits, may be attributed the large number of popular names which have been given it—Beam Bird, Cobweb Bird, Bee Bird, Cherry Chopper, Post Bird, Cherry Sucker, Chanchider, and Rafter.

THE SWIFT,

(Hirundo apus.)

PLATE IX. - FIGURE III.

This species is common in all parts of the British Isles during the summer months; it is believed to migrate hither from the continent of Africa, where it is very abundant. It generally arrives early in May, a little after the Common Swallow and the Martin, and departs

about the beginning or middle of August: a few specimens, however, have been known to stay much later; one was seen in Perthshire on the 8th. of November, 1831, and another in Devonshire on the 27th. of November, 1835, while there are numerous records of individuals having been observed in the months of September and October.

The favourite resorts of the Swift are lofty towers and steeples, fortresses, castles, and abrupt rocks; it is rarely to be seen on the level ground, probably because the shortness of its legs, and the length of its wings, render it unable to mount into the air without great difficulty from such a position. Its curious flight is familiar to all; starting from some elevation, it darts with lightning-like speed into space, alternately flapping its long narrow wings, and gliding or sailing with these organs expanded and apparently motionless. It executes the most rapid turns with wonderful case and grace, and continues its flight for long periods without apparent fatigue. As the main object of its evolutions is the capture of insects, which form its sole food, it usually flies at a considerable height in fine dry weather, and near the surface of the ground when the atmosphere is damp, thus accommodating itself to the level at which its prey is most abundant. Heavy rains, or even thunder-storms, do not prevent the Swift from continuing its pursuit, and it only seems to desist during very high winds and the hours of darkness, when it takes refuge in some crevice of a wall, or under the eaves of a house. The number of insects it consumes must be enormous; Bishop Stanley states that a whole table spoonful were extracted from the mouth of one that had been shot.

Swifts may usually be seen in small parties of from six to twenty; as they fly they frequently utter a harsh and shrill kind of seream, which is supposed to be an expression of enjoyment, and an intimation to their fellows of the plentiful existence of food. "Who is there," says Mr. Stevenson, "with an ear for nature's sounds, that cannot recall some quiet Sunday evening in the parish church, when, through the open doors and windows, scarce a breath of air is felt—when human frailty, too much for even the best intentions, is yielding by degrees to an irresistible drowsiness, and the worthy minister is soothing rather than rousing those slumbering listeners? Suddenly, with a screech that makes one jump again, the Swifts come dashing past the upper windows, no sooner heard than gone, and circling round the steeple in their evening flight, repeat with every passing swoop their strange alarm."

The literal meaning of the specific name of this bird is "the Swallow without feet," but it must not be supposed that it is entirely destitute

of these appendages. They are, however, fashioned in a very peculiar manner, and are better suited for clinging or hanging than for walking; instead of one of the toes being directed backwards, as is the case with most birds, they all point forward, and have the claws turned up beneath. It might be supposed that the feet, being thus cramped and unfitted for terrestrial locomotion, would cause the Swift much inconvenience, especially when it has to collect materials for its nest; but when so engaged it continues on the wing, adroitly picking up any substance it may require with its beak as it passes. The nest is generally placed in holes and crevices at a great height in towers and steeples, as also under the eaves of houses and barns, and in the sides of cliffs and chalk-pits. It is large, shallow, and roughly constructed of twigs, straws, grass, hair, and feathers. The Swift builds in the same spot year after year. The eggs are usually two, but sometimes three in number; they are pure white, and average about an inch in length. Only one brood is reared in the season, the young being hatched towards the end of June, so that by the time they are well able to fly the period of their migration has arrived.

This bird also goes by the names of the Black Martin, Screech, Screech Martin, Screemer, Cran, and Squealer; in some parts of the country it is known as the Deviling, a term probably suggested by its sooty plumage and unearthly cry. Of the Swallow tribe that visit this country the Swift is the largest, being about seven inches in length, and nearly eighteen inches across the expanded wings. Its weight seems disproportionate to its size, not exceeding one onnce. The whole plumage is blackish brown, with a greenish metallic tinge, with the exception of a small patch of greyish white under the chin.

THE SWALLOW,

(Hirundo rustica.)

PLATE IX .- FIGURE IV.

THERE is no bird, with the appearance and habits of which we are better acquainted than the Common Swallow. We hail his arrival with delight, for he is the announcer of approaching summer, and we observe his preparations for departure with sadness, knowing that when he is gone, all the brightness and beauty of the year will shortly vanish also, for gloomy cheerless winter is at hand. But apart from

the interest we take in this bird as a sort of index of the seasons, he is so constantly about our homes, and so beautiful and harmless, that we look upon him as a familiar friend, and love to see him darting swiftly past our windows, or perching on our roofs.

The Swallow sometimes makes its appearance in the south of England as early as the beginning of April, but generally about the middle of that month. It does not commence building until three or four weeks after its arrival. The situations selected for its nest are sheltered spots beneath eaves or projecting roofs of any kind, beams or rafters of outhouses, the under sides of spouts and bridge arches, or the interiors of bell turrets. It has also been known to build in the sides of wells and the shafts of deserted coal-pits. In the "Natural History of Selborne," Gilbert White says, "In general with us this Hirundo breeds in chimneys, and loves to haunt those stacks where there is a constant fire, no doubt for the sake of warmth. Not that it can subsist in the immediate shaft where there is a fire, but prefers one adjoining to that of the kitchen, and disregards the perpetual smoke of that funnel, as I have often observed with some degree of wonder." It is a curious fact that in Ireland Mr. Thompson states that he has never known this bird to build in chimneys. Ornithological literature teems with records of the extraordinary positions in which Swallows' nests have been found. One was placed in the knocker of a door, another under the wooden cover of a large bell that was rung every day, and another in the half-open drawer of a table in an unoccupied garret, to which access was only obtainable through a broken pane of glass. In the museum of Sir Ashton Lever one was preserved which was attached to the body of a dead owl that had been nailed against a barn. The nest, which is broad and cup-shaped, is composed of earth or clay, collected in a moist state from the sides of ponds or streams, and intermingled with straw or grass; it is lined with fine grass, feathers, or other soft materials. The eggs, from four to six in number, are white or reddish white, speckled, chiefly at the larger end, with dark red and ash-colour; they vary considerably in size and form. Two broads are produced in the season, the first of which flies in June, and the second about the middle or end of August. While the young are in the nest, it is stated that the old birds supply them with insects about once in every three minutes during the greater part of the day. After they are fledged their food is dexterously placed in their mouths as they follow their parents on the wing.

Like the Swifts, and for the same reason, these birds fly high in fine dry weather, and near the ground when the air is damp. As

they wheel about in parties of a dozen or more, they frequently utter a short sharp cry, consisting of two high notes. Often when perched on the roof, just after daybreak, the Swallows may be heard engaged in a sort of lively twittering conversation, their soft voices strike the ear agreeably, and seem well in harmony with the brightness and cheerfulness of the early summer morning.

Although the general appearance of the Swallow is familiar to all, it requires a close inspection to become acquainted with the minutize of its plumage. The head, back, and wings are brownish black, with a steely blue reflection which is only seen in certain lights. The tail is of the same colour, with some of the outer edges of the feathers patched with white. The forehead, chin, and throat are chesnut; the breast and under parts of the body buffy white. The irides are hazel; the beak, wings, and feet black.

It was supposed at one time that the Swallows passed the winter in this country, concealed in caves and hollow trees, in a state of torpor or sleep; but this is now known to be a mistake, and has doubtless arisen from some few individuals, that from weakness or some other cause had been unable to undertake the journey, having been found in this condition. Towards the end of October these birds may be observed collecting in large flocks on the fences, roofs, and chimneys; they plume their wings, and twitter to each other as if talking of the long journey that is before them. After this they rise into the air, and wheel around in rapid circles, gradually mounting higher and higher, until at last they take a decided southerly direction, and disappear in the distance. Thus to the Swallow, in the words of Sir Humphrey Davy, "winter is unknown, and he leaves the green meadows of England for the myrtle and orange groves of Italy, and for the palms of Africa." How he finds his way over so many miles of sea and land to these distant countries, and by what means he is enabled to know when the time for his departure has arrived, must remain among the many unfathemable mysteries of instinct.

THE MARTIN,

(Hirundo urbica.)

PLATE IX .-- FIGURE V.

THE Martin generally makes its appearance in this country a few days later than the Swallow, about the 18th. of April being the average

time of its arrival. The two birds are believed to commence their migration from the continent of Africa, where they spend the winter, in company, but the smaller wing of the former, and its consequently diminished powers of flight, cause it to fall behind on the journey. It remains with us until the middle or end of October, taking up its abode in the vicinity of towns, villages, and farm buildings. It is especially fond of building under the eaves of houses, and in the upper corners of windows, hence its names of House Martin and Window Martin.

The nest, which is commenced about the middle of May, is composed of mud or elay, intermingled with straws and stems of grass to bind it together. The birds collect the material from the edges of pools and streams, or the rain-puddles in roads, and carry it in their bills, plastering it against the wall selected, and gradually placing layer upon layer from the bottom upwards. When completed the nest is of an hemispheric form, from six to eight inches in diameter, and has an externally knobbed or rugged appearance, from the projection of parts of the separate pellets of which it is formed. The interior is lined with a small quantity of grass, hair, and feathers. When once a nest is constructed the birds return year after year to the same spot, rebuilding or repairing it as necessary, and will drive away any stranger that gets possession of it. Bishop Stanley relates that a certain pair, one of which was remarkable for a peculiar white feather in its wing, having returned to their old corner of the previous year, and completed their abode, "a strange Swallow conceived the plan of taking possession of the property, and once or twice actually succeeded in driving the owners out. For a week there was a constant battling; at length the two rightful owners were observed to be very busily engaged in lessening the entrance into the nest, which in a short time was so reduced, that it was with difficulty they could force themselves into it singly. After this, one or other of them always remained withm, with his bill sticking out, ready to receive any sudden attack. The enemy persevered for a week, but at length, finding his prospects hopeless, left the pair to enjoy the fruits of their forethought." On another occasion, it is recorded in the pages of the "Naturalist," that an impudent Sparrow ensconced himself in a Martin's nest, and its owners having tried in vain to eject him, flew away and obtained the assistance of thirty or forty of their species, who dragged the unfortunate culprit out, and with one accord fell upon him and killed him.

The eggs, four or five in number, are about three quarters of an inch in length, smooth, white, and unspotted; they are hatched in

about thirteen days. Usually two, but sometimes as many as four broods are reared in a season. It is most amusing to watch the endeavours of the parents to tempt the young from the nest; they spring into the air, and dart around for a few moments, apparently with the object of proving to their timid offspring what a simple matter flight is, and then return with many an affectionate and coaxing twitter, repeating this persuasive treatment until their efforts are successful, and the little troop make their first nervous and uncertain venture into space; or, should kindness and coaxing fail, they will sometimes adopt severer measures, and gently push or drag the waiverers over the edge of the nest.

The habits of the Martin are very similar to those of the Swallow; its note is a lively twitter, very sweet and pleasing, especially when heard in the early morning.

The adult male is a little over five inches and a quarter in length. The beak is short and black; the irides brown; the head, hind part of the neck, and back are glossy bluish black; the tail coverts white, and the tail and wings dull black. The chin, throat, and breast are white; the legs and toes covered with short downy white feathers, and the claws greyish horn-colour. The female resembles the male, but the colour of the upper parts is not so pure, and the chin and throat are of a soiled or greyish white. The young resemble the female.

THE SAND MARTIN,

(Hirundo riparia.)

PLATE IX .--- FIGURE VI.

LIKE the other members of the Swallow tribe, the Sand Martin makes its way to our shores from the continent of Africa, over the larger portion of which it is abundant. It arrives a little earlier than the previous species, and although somewhat locally distributed, is to be met with in all parts of the British Isles, even to the extreme north. The situations it frequents are the steep banks of rivers, sand or loam-pits, and cliffs or quarries where the soil is soft and yielding; hence its specific title, *Hirundo riparia*, meaning the Bank Swallow. In such localities extensive colonies establish themselves, the members of which excavate tunnels or galleries of from two to four feet in

length, at the end of which they place their nests. The birds perform this work by means of their short and pointed bills, using them after the manner of a pickaxe, while they cling with their sharp claws to the face of the bank. As the cavity deepens they force their bodies into it, and push the *debris* out with their feet. When they have tunneled a sufficient distance, they deposit at the inner end a little hay or wool, or a few small feathers, upon which from four to six white eggs are laid. Two broods are hatched in the season, the first being able to fly by the middle of June, and the second towards the end of July.

Like the rest of their genus, these birds feed exclusively upon insects, which they capture on the wing.

The males and females differ little either in size or plumage. The length is about five inches. The bill is black; the irides brown; the legs, toes, and claws reddish brown. The general colour of the upper parts is greyish brown; of the breast and lower parts brownish white.

THE BEE-EATER,

(Merops apiaster.)

PLATE IX. -- FIGURE VII.

The Beo-eater, sometimes called the Gnat-snapper, is but a rare visitor to the British Isles, although abundant in some parts of the continent of Europe. In Africa it is said to be extensively distributed, and from thence small flocks find their way into Spain, Portugal, Greece, and other countries bordering on the Mediterranean. In Italy it is sold in the markets for food. A few individuals have also been met with in Switzerland, France, and Germany, and two were killed in Sweden in 1816. The first specimen obtained in this country, was shot out of a flock of about twenty, at Mattishall, in Norfolk, in June, 1794, and a portion of the same flock was observed passing over the same spot in the following October. Since that time others have been obtained in Yorkshire, Surrey, Kent, Sussex, Dorsetshire, and Hampshire.

In Ireland, one was taken on the sea shore near Wexford, in the winter of 1820, another in the county of Wicklow, and two others occurred in the interior. In Scotland, one was shot in the Mull of Galloway, in October, 1832

The resorts of this bird on the continent are the banks of rivers, vineyards, olive-yards, and sheltered valleys. It is entirely insectivorous, capturing its food principally on the wing in the manner of the Swallow. Although, as may be inferred from its name, it is especially partial to bees, it also eats beetles, grasshoppers, gnats, flies, or indeed any insect that comes in its way. In the island of Crete, the boys have a simple method of capturing the Bee-eater, by means of a fly fastened to a bent pin or fish-hook, and tied to a long slender line. The insect, when released from the hand, mounts into the air, and the *Merops*, ever on the watch, springs at it, and swallowing the bait, is drawn down and taken.

The nest is placed in a hole scooped out in a clayey bank, generally by the side of a river. It is formed of moss, and contains from five to seven glossy white eggs of about an inch in length.

The note of this bird, which is usually uttered on the wing, is described as a "rich warbling chirp." Meyer likens it to the syllables qrillqriririll.

In plumage the Bee-eater is particularly brilliant and conspicuous; indeed he seems better fitted to take his place with the gorgeously-attired feathered inhabitants of the tropics than with the somewhat sombre dwellers in our own woods and fields. The adult male is from ten to eleven inches in length. The bill is nearly black; the irides red; the forehead is light greenish blue, fading into white in front; the crown, neck, back, and wing coverts are reddish brown, passing into saffron yellow towards the tail, which is greenish blue. The chin and throat are bright saffron yellow, the latter bounded below by a line of bluish black. The quills are greenish blue, with the shafts black. The legs and feet are reddish brown. The females are not so bright in colour as the males, and have the green parts tinged with red.

IN CONFINEMENT.

Although the Swallow has been kept alive for as long as two years in confinement, it is not a suitable occupant of an aviary, and the same may be said of the other species included in our present group.



FLYCATCHERS, SWALLOWS, BEE-EATER.

Fied Flycatcher.
 Spotted Flycatcher.
 Swift.
 Swallow.
 Bee-eater.



BUNTINGS.

TT will be seen at a glance that all the birds brought together in our present group bear a strong resemblance to each other in general conformation, although they differ considerably in the tints of their plumage. They have therefore been placed by ornithologists in a single family, and are called Emberizidee, or Buntings. These birds form the connecting link between the Larks on the one hand and the Finches on the other, their wings and claws proving their relationship to the former, and their bills to the latter family. The Buntings are characterized by their rather stout bodies, short necks, wings of moderato length, and longish straight or forked tails; their legs are rather short and toes long, the hinder one furnished with a long claw. Their bills are peculiarly adapted for cracking the husks or shells of the various seeds and berries on which they feed, being short, conical, and pointed, with the edges of the mandibles turned inwards; the upper mandible is slightly overlapped by the lower, and its roof is furnished with a hard projecting knob. Most of the Buntings are social in their habits, living peacefully together in large flocks, except during the breeding season, and being frequently seen in company with their first cousins the Finches and Larks. They are none of them gifted songsters, indeed their notes are in general harsh, shrill, and monotonous. Their nests are simply constructed of straws and fibrous roots,

with a lining of fine grass, hair, and feathers, and are either placed in a hollow, or slightly raised above the surface of the ground.

The beautiful Snow and Lapland Buntings belong to the genus *Plectrophanes*; the first only visits the shores of Britain with regularity, being met with chiefly in the north of Scotland during the winter; of the other species only a few isolated specimens have been found in England.

The five remaining species form a separate group called *Emberiza*, and differ from the members of the previous genus in having the upper mandible narrower, the wings shorter and less pointed, and the knob on the palate more angular and elevated. Of these the Yellow and Black-headed Buntings are the commonest in Britain, the former especially being one of the most familiar and attractive of the feathered species to be met with in our country rambles.



BUNTINGS.

1 Snow. 2. Lapland. 3. Common. 4. Elack-headed.
3. Yellow-hammer. 6. Curl. 7. Ortolan.



THE SNOW BUNTING,

(Pleetrophanes nivalis.)

PLATE X .- FIGURE I.

This pretty and lively little bird dwells for half the year in the cold and desolate Arctic Regions, and the islands of the Polar Seas. Here, during what it seems a mockery to call summer, it builds its nest and rears its young. It also breeds in Iceland, Lapland, Siberia, Norway, Sweden, and other northern countries, only forsaking these parts during the winter months, when it visits the British Isles, Germany. Austria, France, and even Italy. It arrives on the shores of the Orkney and Shetland Isles about the middle of October, and by the end of the month becomes dispersed over the greater part of Scotland and England. Large flocks may be frequently seen in the northern districts, but a few individuals only reach the south. Mr. Saxby gives the following graphic account of this species as observed by him in Shetland:—"Seen against a dark hill-side or a lowering sky, a flock of these birds presents an exceedingly beautiful appearance, and it may then be seen how aptly the term 'snow-flake' has been applied to the species. I am acquainted with no more pleasing combination of sight and sound than that afforded when a number of these birds, backed by a dark grey sky, drop as it were in a shower to the ground, to the music of their own sweet tinkling notes." Macgillivray thinks it probable that the Snow Bunting breeds on the higher Grampians, as on one occasion he saw a flock of eight individuals which evidently consisted of two old birds with their young family.

Plectron a spur, phaino to show, and nivalis snowy, are the words from which this interesting little bird derives its specific name. During frost and snow it frequents the neighbourhood of the sea-shore, but retires inland when the weather is mild. In this country it feeds on oats, wheat, barley, and other seeds, and also on small insects, but in the bleak regions of the Pole it subsists on the seeds of the

grasses, which are there so abundant that they form one-fifth of the phænogamous vegetation (that is, plants whose seed-vessels are placed externally), while in other parts of the globe the preportion is less than half as great. The seeds of these grasses are retained during the winter, so that the Buntings can obtain them immediately on their arrival, after the melting of the snow. "In passing down the Seneca River, towards Lake Ontario," says Wilson, "I was surprised by the appearance of a large flock of these birds feeding on the surface of the water, supported on the tops of a growth of weeds that rose from the bottom, growing so close together that our beat could with great difficulty make her way through them. They were running about with great activity; and those I shot and examined were filled, not only with the seeds of this plant, but with a minute kind of shell-fish that adhered to the leaves. In these aquatic excursions they are doubtless greatly assisted by the length of the hind heel and their claws."

The flight of these birds is described as low, performed in an undulated line, by means of repeated flappings and short intervals of cessation; when they have arrived at a fitting place, they wheel suddenly round, and alight rather abruptly. Usually, when not about to travel to a distance, they fly near the ground; Naumann says the evolutions performed by a flock are extremely curious, they whirl round each other, and wind about, much in the fashion of waltzers in a ball-room. On the ground they run with rapidity, not hopping after the manner of Sparrows, but moving each foot alternately.

The nest is generally placed in the cleft of a rock, or in a pile of stones or timber on the sea-shore; sometimes under a single large stone; the entrance being only just large enough to admit the bodies of the owners. It is composed of dry grass and moss, and lined with down, feathers, and a little hair. One was found by Captain Lyons at Southampton Island in the bosom of a dead Esquimaux child which had been buried under a heap of stones. The eggs, from four to six in number, are greenish or bluish white, with a zone of umber brown spots around the thicker end, and numerous blotches of pale purple.

The plumage of this bird varies greatly; some specimens have the head, neck, and under parts of the body, a patch on the wings, and the edges of the outer tail feathers pure white, and the remainder of the plumage black. Others are much tinged with brown. The amount of white is subject to great variation. These differences were the cause of much confusion with naturalists, the varieties being described as distinct species under the names of the Mountain, Tawny, and Snow Bantings. All doubts as to their identity were set at rest by Mr.

Foljambe, who in a letter to Colonel Montagu says:—"A few years ago I shot more than forty from the same flock, hardly any two of which exhibited precisely the same plumage, but varied from the perfect Tawny to the Snow Bunting in its whitest state."

THE LAPLAND BUNTING,

(Plectrophanes Lapponica.)

PLATE X .- FIGURE II.

This species, also called the Lapland Lark Bunting, Lapland Finch, and Lapland Long-spur, very closely resembles the Snow Bunting in form and proportions, but its wings are rather shorter, and its bill shaped more like that of a Finch. It is a native of the northern countries of Europe and Asia, and the Arctic Regions, but a few specimens have been met with in Germany, France, and Switzerland, and others in our own island. The first of the latter was purchased in the London market, and afterwards placed in the museum of the Zoological Society. The second was taken on the Sussex downs, and the third a few miles north of London. Another was caught at Preston, in Lancashire, and another near Kendal, in Westmorland. Two other specimens were obtained in Norfolk, the first near Postwick in January, 1856, and the second at Crostwick in April, 1862.

Dr. Richardson states that this bird breeds in moist meadows on the shores of the Arctic Sea. The nest, usually placed on a small hillock among moss and stones, is composed of dry stems of grass, and lined with deer's hair and feathers. The eggs, from five to seven in number, are pale ochre-vellow, spotted with brown.

The food of the Lapland Bunting consists chiefly of the seeds of arctic and alpine plants, such as the willow and arbutus, and also of insects. Its call-note is melancholy, and is said by Meyer to resemble the syllables 'itirr' and 'twee.' The male has a simple but pleasant song, which it usually utters whilst on the wing.

In Lapland these birds are commonly to be seen in large flocks, they move rapidly along the ground in their search for food; but if disturbed, mount into the air and fly swiftly and buoyantly. They are said to sometimes associate with Larks and other birds of similar habits Naumann states that they are frequently killed for food, and that their flesh is delicate and agreeable.

The adult male is a little over six inches and a half in length. The bill is yellow and blackish at the point. The irides are chesnut, and the legs, toes, and claws nearly black. The top of the head and throat are black; a reddish white line passes over the eyes and takes the form of the letter S at the lower part. The back is brown, streaked with a deeper shade; the wings brownish black, with the small coverts and quills edged with reddish. The lower part of the body is greyish white, spotted and streaked at the sides with brownish black. The tail is blackish brown, the feathers edged with reddish, and the onter marked with a wedge-shaped white spot at the end. The female is without the black on the head and throat, and the rest of her plumage is of a redder tint than that of the male.

THE COMMON BUNTING,

(Emberiza miliaria.)

PLATE X .- FIGURE III.

This species is most plentiful in the southern counties from Sussex to Cornwall, and in the districts surrounding London, but it is to be met with on open pastures, and grass and corn fields in all parts of the country. It is common in North Wales, Ireland, and some parts of Scotland—Dumfriesshire, Edinburghshire, and Sutherlandshire; as also in the Orkney and Shetland Isles, and the Hebrides. On the continent of Europe it is found from Russia to the Mediterranean, and also in Denmark, Norway, and Sweden. It has likewise been observed in Egypt and the Canary Isles.

During the spring and summer the Common Bunting may be frequently seen perched on a low fence or hedge, or the branches of a small tree, uttering its rather harsh and unmusical notes, which from their resemblance to the noise produced by a stocking-machine, has gained for the bird the name of "Stocking Weaver." The ordinary call-note is represented by the syllables 'chuck' or 'chit.'

This species has a strong and undulated but rather clumsy flight. When surprised in a field, it flies off with a direct rapid motion; but

often when an individual, which has been resting on a twig or wall-top, starts away, it allows its feet to lang for a short time before it commences its bounding flight.' On the ground its movements are slow and ungraceful, in consequence of the shortness of its legs compared with the size of its body.

The food of this bird consists partly of insects, but principally of grain, and the seeds of the millet and other grasses, hence its specific name Miliaria. During the winter it visits farm-yards, in company with Chaffinches, Sparrows, and other birds, and sometimes does great damage to the corn-stacks. Knapp, in his "Journal of a Naturalist," says, "It could hardly be supposed that this bird, not larger than a Lark, is capable of deing serious injury; yet I this morning witnessed a rick of barley, standing in a detached field, entirely stripped of its thatching, which this Bunting effected by seizing the end of the straw, and deliberately drawing it out, to search for any grain the ear might contain. The Sparrow and other birds burrow into the stack, and pilfer the corn; but the deliberate operation of unroofing the edifice appears to be the habit of the Bunting alone." In consequence of its partiality to grain this bird is often called the Corn Bunting; its flesh is considered excellent eating.

The nest, which is finished towards the end of April, is usually placed on the ground, under the shelter of a bush or tuft of grass, or sometimes slightly raised among brambles or briars. It is composed of straw and fibrous roots, intermingled with dry grass and leaves, and lined with fine fibres and hair. The eggs, from four to six in number, are of a pale greyish or yellowish white ground colour, irregularly spotted and streaked with reddish brown or greyish purple. They are usually of an obtuse oval shape, but vary much in form, as also in size and colour. Some specimens have a nearly white ground.

Although these birds live in pairs during the spring and summer, they are usually to be seen in large flocks during the autumn and winter; many of them roost in the bushes when the nights are cold, while others nestle amid the stubble; the latter are frequently caught in the nets employed for capturing Sky Larks.

The Common Bunting is the largest of its family, being about seven and a half inches in length. Its body is particularly stout and robust, while its wings and legs are rather short, so that it has an awkward and unwieldly appearance. Neither is its plumage at all gay or attractive; the upper parts are light yellowish brown, with the shaft of each feather blackish brown at the extremity. The general colour of the lower parts is pale yellowish grey, many of the feathers of the throat and breast are tipped with brownish black. The irides are dark hazel; the legs,

toes, and claws pale yellowish brown; and the beak dark brown on the npper mandible, and yellowish on the lower. Varieties in colour are not uncommon—Neville Wood possessed the skin of one which was nearly white, and another specimen was found at Pickering, in 1850, of a pale straw-colour. The female closely resembles the male, but the young birds are rather darker, and the spots upon the feathers larger.

THE BLACK-HEADED BUNTING,

(Emberiza schæniclus.)

PLATE X .- FIGURE IV.

Although the Black-headed Bunting is almost as abundant in this country as its yellow relation next described, it is not nearly so well known, partly on account of its more sequestered habits, and partly because its plumage is less brilliant, and does not so readily attract the eye. It remains in England throughout the year, but is migratory in most parts of Scotland, arriving about the middle of April and departing in October. On the Continent of Europe it is a summer visitor to Denmark, Norway, and Sweden, and is also found from Russia to Italy, being particularly abundant in Holland.

This species is called by the several names of the Mountain Sparrow, Passerine Bunting, Ring Bunting, Chink, and Black Bonnet. It also has the titles of Water Sparrow and Reed Bunting, on account of its partiality to marshy spots on the borders of lakes and streams, where the reed, the rush, and the osier flourish. To the wanderer in the fens of Cambridgeshire or the broads of Norfolk it is a most familiar object, flitting gracefully about among the tall aquatic plants, or clinging to their stems while it picks out their seeds with its short and powerful bill. "The security and even grace with which it rides," says Mudie, "when the stems are laid almost level with the water, now on one side and then on another, are well worthy of notice. It not only adheres as if it were part of the plant, but contrives to maintain nearly the same horizontal position, with its head to the wind." In the winter months these Buntings forsake the marshes and collect in small flocks, visiting farms and stackyards in company with other grain-eating birds. The parties break up again towards the end of March, and

return in pairs to their summer haunts. They build on or near the ground among coarse grass or rushes, or in the lower part of a thorn or other bush. The nest is composed of stems and stalks of grasses, fragments of rushes, and other similar materials, and neatly lined with finer grass, hair, and the down of the reed. The eggs, which are deposited about the first week in May, are of a yellowish or greenish grey colour, delicately marked and spotted with a darker shade of the same; the larger end is frequently covered with fine angular and curved lines. The parent birds display a strong solicitude for their young, and will use many artifices to attract an intruder from the vicinity of the nest. In the "Magazine of Natural History," Mr. Salmon, of Thetford, thus writes:-"Walking last spring among some rushes near a river, my attention was arrested by observing a Blackheaded Bunting shuffling through the rushes, and trailing along the ground, as if one of her legs or wings were broken. I followed her to see the result, and she, having led me to a considerable distance, took wing, no doubt much rejoiced on return to find her stratagems had been successful in preserving her young brood although not in preventing the discovery of the nest, which I found was placed, as usual, on the side of a hassock or clump of grass, and almost screened from view by overhanging dead grass."

The song of this bird is rather harsh and shrill, and consists merely of two or three short notes, succeeded by a long one; Meyer likens it to the word 'sherrip' pronounced quickly. It may be heard at all seasons, and is uttered from the top of a reed or low bush.

The male of this species is really a handsome bird. The head and throat are rich velvet black; a line from the beak down the sides of the neck, and a broad band over the back of the neck are white. The feathers of the back, wings, and tail are blackish bordered with chesnut. The breast and nuder surface of the body are greyish white. The irides are hazel; the legs, toes, and claws, dusky brown. The male is about six inches and a quarter in length, and the female a little shorter. The plumage of the latter is of a redder tint, and the band over the neck is yellowish grey. The young resemble the female.

THE YELLOW BUNTING,

(Emberiza citrinella.)

PLATE X .--- FIGURE V.

This species is common in all parts of the British Isles, and goes by a variety of names—the Yellow-Hammer, Yeldring, Yoldring, Yowley or Yite, Yeldrock, Yoit, Skite, Goldie, Golden Bunting, and Devil's Bird. It frequents wooded districts and commons covered with gorse or broom, and often attracts the attention of the traveller by its brilliant plumage and elegant form, flitting before him from tree to tree, or perching conspicuously on the top of a hedge or bush. From the latter position the male frequently utters his somewhat harsh and monotonous song, which consists of a 'few shrill notes, concluding with a protracted one.' Indifferent as his music is, compared with that of many of the woodland choristers, it is far from disagreeable to the true lover of nature; Graham says—

"Even in a bird the simplest notes have charms; For me I love the Yellow-Hammer's song. When earliest buds begin to bulge, his note, Simple reiterated, oft is heard On leafless briar, or half-grown hedge-row thin, Nor does he cease his note till autumn's leaves Fall fluttering round his golden head so bright."

Mr. Stevenson, in his interesting work on the "Birds of Norfolk," says, "Though resident with us at all seasons, the Yellow Bunting seems more particularly associated with the recollection of heat and dust, its long-drawn weary song accords so well with the dry scorching atmosphere, and, through a strange ventriloquial power (possessed by this bird in an eminent degree), its notes are heard, from a distance, as though close to the ear of the listener, and when apparently furthest off, are not unfrequently uttered within a few yards." Whilst singing

this bird exhibits no animation, but sits motionless, and appears to use but little exertion. The ordinary note, which is uttered at the end of autumn and throughout the winter, is a rather harsh and low chirp.

Early in the spring the Yellow Buntings select their partners, and commence building operations. They usually choose some well sheltered spot amid bushes, or in a clump of grass or other herbage, and construct a rather bulky nest of dry grass, fibrous roots, twigs, and moss, liuing it neatly with finer grass and hair. In this are deposited from four to six eggs, of a pale purplish white colour, streaked and spotted with dark reddish brown. The markings have been thought to bear some resemblance to written characters; hence this bird has been sometimes called the 'Writing Lark.' In the first volume of the "Zoological Journal," Mr. Blackwell records the curious fact that a female of this species deposited her eggs on the bare ground, and sat upon them until they were hatched. The male is an affectionate and attentive husband, often taking the place of his mate upon the nest, and exhibiting his pleasure in thus lightening her labours by singing cheerfully the while. The young are seldom able to fly before the second week in June, but usually leave the nest within a fortnight after the time they are hatched, and roost at night with their parents. In favourable seasons two or even three broods are reared.

During the winter these birds are to be seen in large flocks, visiting in company with other species the stack-yards and stubble-fields in search of grain, seeds, and insects. Their flight is strong and rapid, but easy and graceful; they alight in a sudden and abrupt manner when anything attracts their attention on the trees or 'terra firma,' jerking out all their tail feathers at the same moment. On the ground they advance by short leaps, with the body in a horizontal position, and the breast almost in contact with the surface. "When perched on a tree, especially in windy weather, they cronch close to the twigs, draw in their neck, and keep the tail declined."

This beautiful bird, which obtains its specific name from *citrus*, a lemon or citron tree, rarely attracts the attention it merits in consequence of its great abundance. "Few persons are fully aware," says Neville Wood, "of the exquisite though simple colouring of the Yellow Bunting, which, common though it be, is not, in my opinion, surpassed in this particular by any rarer species that visits our island."

The adult male, which weighs about seven drachms, and is a little over seven inches in length, has the head and lower portion of the neck of a bright lemon yellow, and the breast and sides yellowish red, with each feather darker in the centre. The upper part of the back

and wings are reddish brown, and the quill and tail feathers dusky black margined with chesnut brown and olive. The bill is a bluish horn-colour. The irides are dark brown, and the legs, toes, and claws light yellowish brown, tinged with rcd. The female is much duller in colour than the male, and is less marked with yellow. The young, when first fledged, are dull yellowish brown above and yellowish grey beneath, they are without the bright yellow on the head

THE CIRL BUNTING,

(Emberiza cirlus.)

PLATE X .- FIGURE VI.

This rare species bears a strong resemblance to the Yellow Bunting, and no doubt sometimes escapes observation in consequence. It was first identified and described as a British bird by Colonel Montagu in the year 1830, from specimens observed in the neighbourhood of Knightsbridge, and in the following summer the same distinguished ornithologist discovered that it bred in several localities on the coast of Devonshire, and communicated his observations as to its habits, etc., to the Linnean Society. Individuals have sine been met with in various parts of England, most of them in the southern counties, but some as far north as Yorkshire. In Scotland a single specimen was procured near Edinburgh. It is a migratory bird in most of the temperate and southern parts of Europe, and occurs also in Asia Minor.

Mr. Blyth, who has earcfully observed the habits of this bird in the Isle of Wight, where it is known as the French Yellow-hammer, says it is much more shy than the Yellow Bunting, and frequents trees rather than hedges, particularly the summits of lofty elms.

The nest is usually placed in furze or lew bushes, and is composed of dry stalks of grass and a little moss, and lined with long hair and fibrous roots. The eggs, four or five in number, are of a dull bluish or greenish white, irregularly streaked and spotted with reddish brown, they vary greatly both in colour and markings. The young are hatched in a little over a fortnight, and are fed by the parents exclusively on insects.

The male frequently sings from the upper branch of a tree, or the top of a bush, in the manner of the Yellow Bunting. His note is by no means musical, being harsh, shrill, and very monotonous. He continues in full song until the middle or end of August, when the autumnal moult takes place.

The food of this bird consists partly of caterpillars, beetles, and other insects, but chiefly of seeds and berries; some old birds were observed near Brading, in the Isle of Wight, to eat freely of the berries of the woody nightshade.

The summer plumage of the adult male is as follows:—Back and wings bright chesnut brown, the central part of each feather brownish black; top of the head dark olive, streaked with black; a streak above the eye, another beneath it, and a crescent-shaped patch on the throat, bright lemon yellow; chin and upper part of throat black; upper part of breast and sides yellowish red; lower part yellow; tail feathers dusky black, the outer ones patched with white. Bill bluish lead-colour; irides hazel; legs, toes, and claws light brown. The winter plumage is less brilliant generally. The head of the female is of a lighter colour, and she is without the bright lemon yellow above and below the eye and on the throat.

THE ORTOLAN BUNTING,

(Emberiza hortulana.)

PLATE X .-- FIGURE VII.

The Ortolan Bunting is a common species in many parts of the European continent, visiting Denmark, Norway, and Sweden, and also France, Spain, Italy, and Holland. But a few specimens have been obtained in this country; the first which came under the notice of British ornithologists was captured in Mary-la-bonne fields by a London bird-catcher, and described by Brown in his "Illustrations of Zoology," under the name of the Green-headed Bunting. Another was obtained off the coast of Yorkshire by the master of a merchant vessel in the month of May, 1822, and a third was killed near Manchester in November, 1827. Another was taken near Norwich, another in the Seilly Isles, and another near Worthing, in Sussex.

As may be inferred from its specific name, (hortulana, from hortus, a garden,) this bird is a frequenter of the cultivated garden and orchard, but it also resorts to woods, hedges, and fields, especially those in the neighbourhood of water. It feeds chiefly on insects during the early part of the season, but afterwards on grain and the seeds of grasses. Its nest is frequently built in a corn-field in some slight hollow in the ground, but sometimes in the lower branches of a tree or bush; it is composed of dry grass and small roots, thickly lined with finer portions of the latter, with occasionally a few hairs. The eggs, numbering from four to six, are bluish white or reddish grey, streaked and spotted with blackish blue, but they vary much in colour.

The song of this bird very much resembles that of the Yellow Bunting, but it is rather clearer and not quite so harsh, although equally monotonous. It is repeated frequently by the male during the

pairing season.

In Italy, Germany, and France, great numbers of these birds are captured in nets, and fattened for the table. Their flesh is much esteemed, and is said to resemble that of the Snipe, but to be even more delicate. Mr. Gould says that "when they are caught they are kept in a dark room, and there fed with plenty of oats and millet seed, upon which they quickly fatten." A correspondent of the "Illustrated London News," writes, "This is true only to a certain extent, and is apt to mislead many of your readers. The fact is that the Ortolan has a peculiar habit of feeding, which is opposed to its rapid fattening. To surmount this peculiarity, those who pander to the taste of Italian gourmands, place the Ortolans in a warm chamber, perfectly dark, with only one aperture in the wall. Their food is scattered over the floor of the chamber. In the morning the keeper of the birds places a lantern in the orifice of the wall; by the light thus thrown in, the Ortolans, thinking the sun is about to rise, greedily consume the food upon the floor. More food is scattered about, and the lantern The Ortolans soon fall asleep. In about two hours the whole process is repeated, and so on four or five times every day. The Ortolans thus treated become like little balls of fat in a few days." When ready for the market the birds are killed, steeped in boiling water, and packed in casks filled with spiced vinegar, to preserve them for home use or exportation. During the later years of the Roman Empire, when great wealth had produced its usual result of luxuriousness and effeminacy, the delicacy of the flesh of the Ortolan was well known, and immense numbers were eaten after being fattened in the same manner as in the present day.

This species is a little smaller than the Yellow Bunting, the male

being from six and a quarter to six and a half inches in total length. The beak is reddish brown; the irides are brown; the legs, toes, and claws pale brown. The head, nape, and front of the neck are grey, with a stripe that passes from the beak down the neck, and a space around the eye bright yellow. The back is reddish brown, marked with dark streaks. The wings are dusky, with the quills edged with reddish brown. The tail is also dusky, the two outer feathers having on them a wedge-shaped white spot. The chin, throat, and breast are yellowish green, fading into reddish buff on the under surface of the body. The female is a little smaller, of a similar colour, but rather duller.

IN CONFINEMENT.

Becustein kept a pair of Snow Buntings in his aviary for six years, they were fed on the universal paste, always kept cool, and allowed plenty of water to bathe in. He says, "If birds of this species are confined in a cage, they must be fed on oats, millet, poppy, hemp, or linseed." Probably the Lapland Bunting would thrive if treated in a similar manner, but our readers are not likely to have an opportunity of trying the experiment, in consequence of its extreme rarity in this country.

The Common and Black-headed Buntings are rather delicate birds, but may be kept alive in confinement if fed on the ordinary paste, varied with oats, and the other seeds above mentioned. They may either be allowed the range of the room, or confined in a large Lark's cage.

The beautiful plumage of the Yellow Bunting renders it an attractive occupant of an aviary, although its colours are not nearly so bright when it is kept in confinement as when at liberty. It is by no means a dainty feeder, indeed a continual change of diet is necessary to keep it in health. Oats, poppy-seed, bread crumbs, soaked hempseed, canary-seed, meat, all will suit it, and it will also eat freely of caterpillars and insects of all kinds. It is, however, rather subject to decline, a disease which manifests itself externally by a puffed and inflated appearance of the body. Should such symptoms be observed, it should be fed chiefly on crushed oats, hemp-seed, and ants' eggs, and a piece of oak bark and a rusty nail should be kept in its drinking water.

Montagn states that "having taken the young of the Cirl Bunting, it was found that insects were their most partial food, especially the common grasshopper. When they could peck, the smaller seeds were acceptable, and canary the favourite; of grain, wheat and barley were rejected, but oats were greedily devoured, after they had dexterously and quickly deprived them of their outer coat."

The Ortolan Bunting is so rarely obtained in this country that it would be superfluous to describe its treatment in confinement.



1. Snow. 2. Lapland. 3. Common. 4. Black-headed. 5. Yellow-hammer. 6. Cirl. 7. Ortolan.



FINCHES.

THE present group includes some of the most beautiful and familiar of our British species; several of its members are particularly rich and soft in the colouring of their plumage, and will bear comparison in this respect with the brilliant feathered inhabitants of warmer climates than our own. Although, in calling them all Finches we have adopted the popular rather than the scientific nomenclature, we are but following in the steps of some of the earlier ornithologists. As we wish our readers, however, to become acquainted with their present arrangement into genera, we will, after describing as briefly as possible the general characteristics of the family to which they belong, enumerate the divisions according to modern authorities.

All the birds here grouped together agree in the following particulars—their bodies are ovate, their heads large, necks short, and their tails and wings of moderate length. Now if you carefully examine a common Sparrow you will observe that this description exactly applies to him. He has therefore been chosen as a typical bird, and his Latin name passer has been applied to the whole family of birds of similar structure. The Passerinæ are active and lively little creatures, living chiefly on seeds and grain, for the removal of the hard coverings of which their beaks are specially adapted. They are generally distributed over the country, and are to be met with chiefly in the cultivated parts. During the winter they assemble in large flocks, and approach the habitations

of man, in their search for food in the stackyards and stubble-fields. They build rather large but compact nests, and lay from four to eight eggs, usually spotted, streaked, or clouded. Their flight is in general strong and rapid, but they move rather clumsily on the ground. First in our group we have the only two British representatives of the genus Fringilla, the Chaffinch and Mountain Finch. The Fringilla are neat and compact in shape, and have shortish, straight, and conical beaks. Their plumage is brightly colonred, and delicately marked.

The Green and Haw Finches belong to the Coccothraustes, a genns deriving its name from coccos a berry, and thrauö to break; they have thick and powerful bills, by means of which they are not only able to crack the onter husks of seeds and grain, but even the hard stones of plums, cherries, and other fruit. Their heads are large, broad, and rather flat at the top, their necks thick, and their legs short. Next we have our favourite and familiar friend the Goldfinch; he belongs to the genus Carduelis, and has a rather longer bill, and more slender body than most of his relations, so that his appearance is less clumsy and heavy. Last comes a representative of the genus Loxia, the portly Bullfinch, with his glossy black head and brilliant red breast.



FINCHES.

Chaffingh. 2. Mountain Finch. 3. Greenfingh. 4 Hawfingh. 5. Goldman. 6. Bullingh.



THE CHAFFINCH,

(Fringilla calebs.)

PLATE XI .- FIGURE I.

This prefty and lively little bird is a permanent resident in Britain, and is generally distributed from the southern counties of England to the extreme north of Scotland and the Orkney Islands. It is also common in most parts of the European continent, being stationary in the warmer, and migratory in the colder countries. It has been met with in the Canary Islands, Madeira, and the north of Africa.

Towards the end of autumn the number of our resident birds is much increased by the arrival of visitors from Sweden and Norway. They cross the sea in large flocks, usually reaching our shores in the night, as is testified by the numbers that are killed by contact with the windows of lighthouses. Linnæus, in his "Fauna of Sweden," says that only the females migrate from that country, but the males remain; he has therefore bestowed the title of calcbs on this species, with reference to the solitary state of the latter. Professor Nilsson, however, states that at the present time the larger portion of both sexes leave the country, but in distinct flocks. A similar separation takes place in Britain about the month of November, and from that period until the return of spring few females are to be seen. The males associate with Yellow Buntings, Sparrows, and other birds of similar habits, feeding in the stubble-fields while the weather continues mild, and the ground free from snow, but visiting stackyards and other places where food and shelter are obtainable during the depth of winter. These flocks break up towards the end of March, and a terrible amount of wrangling and fighting takes places connected with the selection of partners. Often two or more rival males may be seen perched on the branches, singing with all their might and main, and with every appearance of intense excitement; when their voices fail they rush at each other with partly expanded wings and open beaks, and fight furiously, not unfrequently wounding each other severely. As soon as they have paired, a spot is selected for the nest, generally the forked or knarled branch of an old tree, and building operations are commenced. The Chaffineh is a skilful architect, and constructs a nest of wonderful neatness and compactness. The materials used for the exterior are grasses, fibrous roots, and stalks of plants, intermingled with pieces of bark, spiders' webs, moss, and lichens; the latter are fixed on the surface, and render it so similar in appearance to the branch on which it is placed that only the experienced nest-hunter is able to discover it. The lining consists of wool, feathers, and the hair of the horse or cow. The last is obtained by the birds from the cracks and crevices in fences or trees in the pasture fields, against which the cattle are in the habit of rubbing themselves. Besides the branches of trees, the Chaffinch not uncommonly builds in the ivy on walls, or among the twigs of the hawthorn and other bushes.

A correspondent of the "Field Naturalist's Magazine," relates that a pair of these birds placed their nest in a shrub so close to his drawing-room windows that he was able to observe their operations. The female alone worked at the structure, and was almost unceasingly employed on it for nearly three weeks. "Think of this, bird-nesters," says Mr. Morris, and we heartily echo his sentiments, "and leave the artist the product of her toil; take gently ont, if you will, an egg or two for your collection, but leave her some to gladden her maternal heart." The eggs are four or five in number, generally of a dull bluish green colour, thinly spotted with reddish brown, and having a few irregular lines of the same. The colour is, however, rather variable; some have been found of a uniform dull blue, without any spots. While the female sits the male perches close on the branches, and cheers her with his song, and when she quits the nest in search of food, takes her place. The young are hatched in about a fortnight, and are fed by both parents exclusively on insects. Two broads are usually reared in a season.

The Chaffinch has a short but mellow and cheerful song, which is sometimes heard as early as the end of February. Macgillivray says, "the people of the south of Scotland most unpoetically imagine it to resemble the words 'wee, wee, wee, wee drunken sowie,' to which no doubt it bears some resemblance." In Belgium, where the song of the Chaffinch is highly esteemed, trained birds are brought together by their owners to compete with each other. Heavy bets are laid as to the result, the bird that 'trills' the oftenest in the course of an hour being considered the victor. The ordinary call-note of this species resembles the syllables 'twink, twink,' or 'pink, pink;' hence two of its popular names.

The farmer too often looks upon the Chaffineh as a deadly enemy,

to be destroyed on every opportunity, forgetting that although it frequently does considerable damage to the crops, it also destroys a large number of insects, and performs much useful work in consuming the seeds of groundsel, crowfoot, and other weeds.

The Chaffinch is one of the handsomest of our British species, his plumage is bright and beautifully marked. In length he is about six inches, and in breadth across the wings cleven and a half inches. On the forchead he is black; the upper part of the head and neck are ash grey; the chin, throat, and breast purplish red. The wings are chiefly black, striped in two places with white. The tail is brownish black, with some of the feathers white. The irides are hazel; the legs, toes, and claws wood brown. The female is a little smaller, and of a greyer colour than the male

THE MOUNTAIN FINCH,

(Fringilla montifringilla.)

PLATE XI .- FIGURE II.

This bird, also called the Brambling, Bramble Finch, and Lulean Finch, derives its scientific title from mons, a mountain, and fringilla, a Chaffinch. Closely resembling the species last described, in general form and the markings of its plumage, it is almost impossible to distinguish it therefrom at only a slight distance. One of the chief differences revealed by a close inspection is a tooth-like projection on the edge of the lower mandible near the base. The male is about six and a half inches in length, and has the bill dusky, and bluish black at the point; the head, neck, and back deep black, except during the winter, when the feathers are tipped with grey; the chin, throat, and breast on the upper part, light reddish brown, the latter white or yellowish white on its lower part, and spotted on the sides with black and brown; the wings for the most part black, with two nearly white bands running across them, and many of the feathers edged with light reddish brown; the tail black, edged with grey; the irides brown; the legs, toes, and claws light brown. The female is a little smaller than the male, and of a browner colour; her sides are marked with long pale black streaks.

The little Mountain Finch resembles its congener as much in manners as in appearance, moving on the ground by short leaps in a

similar way, and having the same rapid and undulated flight. It builds among the branches of the lofty fir-trees, that lift their vast pyramids of green in the clear mountain air of northern regions. Its nest is neatly constructed of moss, and lined with wool and feathers; it usually contains from four to five white eggs, spotted with yellowish brown. Like the rest of its family it feeds chiefly on seeds, but partly on flies and other insects. Mr. Scales, a Norfolk farmer, used to consider these birds of service to his land from their devouring large quantities of the seeds of the knot-grass. In severe weather flocks have been observed feeding on beech-mast.

The call-note of this bird is a simple and monotonous chirp resembling the syllable 'tweet.' Its song, which is uttered chiefly in the spring, is very similar to that of the Chaffinch, but less sweet and pleasing. Meyer likens it to the word 'chip-u-way.'

The Mountain Finch makes its summer home and rears its young in the northern parts of Europe. It is common in Norway, Sweden, Denmark, and Lapland, and particularly numerous in Finland. About the end of August it departs from these regions, and gradually spreads over the whole continent as far as Greece and Italy. It is stated to also visit Asia and Asia Minor. It arrives in this country in large flocks, generally in September, but sometimes much later, and takes up its abode chiefly in the northern counties, although considerable numbers have occasionally been met with in the extreme south. A correspondent of the "Times" stated that an immense flock visited Stoke Park, near Slough, in November, 1865. Their numbers were so great, that "the flight, which was seen starting from their roosting-place one morning, continued streaming on without intermission for thirty-five minutes. The person who noted this killed forty-five at one shot."

THE GREENFINCH,

(Coccothraustes chloris.)

PLATE XI .- FIGURE HI.

ALTHOUGH less plentiful than the species last described, the Green Linnet, as this bird is frequently called, is to be met with in all the cultivated parts of Britain, except the northern and western Scottish islands. It is also common over the whole of Europe and a large

portion of Asia. The upper parts of the body and breast of the male are olive green; the wings ash grey, with bright yellow edgings to the quills; the tail brownish black, except the four outer feathers on each side, which are yellow for three fourths of their length. The whole under surface of the body is greenish yellow. The bill, legs, and feet are pale reddish brown, and the irides dark hazel. The female is without the bright yellow on the wings and tail, and altogether of a greyer tint.

This is a sprightly and active little bird, notwithstanding the rather heavy and clumsy appearance it presents in consequence of the great size of its head and bill. It flies with ease and rapidity, flapping its wings quickly two or three times, and then closing them until a fresh impetus is required; it usually hovers for a few moments before alighting. "On being alarmed," says Macgillivray, "these birds rise abruptly, fly off, and betake themselves to the twigs of the highest trees in the neighbourhood, on which they settle abruptly, and remain in a crouching attitude until the alarm is over, when they drop into the field or yard." Frequently when perched, and sometimes when flying, the Greenfinch utters its call-note, which is likened by Meyer to the word 'tway;' it is rather sweet and full, and though soft can be heard at a considerable distance. The alarm-note is similar, but is accompanied by a distinct low whistle. This bird can scarcely be said to possess a song, although its notes are slightly varied, and by no means unpleasing during the spring and autumn.

The food of this bird consists largely of wheat, eats, and other grain, but it also devours the seeds of many of the common weeds; in the spring it feeds chiefly on insects and their larvæ. On the Continent it is said to eat large quantities of hemp, rape, and linseed.

At the commencement of the breeding season, a good deal of fighting takes place between the males, but blood is rarely spilt. The positions selected for the nest are low bushes or hedges, the ivy against walls, or the forked branches of trees. Very frequently a number of nests are found quite close to each other in a shrubbery, or sometimes several in a single large bush. The structure is put together entirely by the female, and consists of straws, twigs, and fine roots, covered with a layer of moss, and snugly lined with wool, hair, feathers, and thistle-down. The eggs are from four to six in number, of a bluish or reddish white, spotted with purplish grey and reddish brown, and more or less streaked with black. Some have been found without any markings at all, and others mottled all over. Two broods are generally reared in a season. For the fortnight during which the female sits she is supplied with food by her attentive mate. The

young are fed on caterpillars and small insects, and are most carefully tended and guarded by the old birds, who utter loud cries of distress and alarm if any intruder approaches the nest. Meyer relates the following instance of their affection for their offspring:-"One day several little nestlings were caught in a field adjoining the garden; they were scarcely fledged, and could not fly; we put them in a small cage, which we placed in a low hedge bordering the field where they were captured. It was not long before they were discovered by the parents, who immediately visited them, and appeared to bring them food. These marks of affection interested us, and fearing that where they were placed the young nestlings might become a prey to prowling cats, we gave them their liberty. The parents, however, appeared not vet satisfied respecting the safety of their young ones, for a short time after they were observed in the act of carrying one of them away: they were bearing it between them at about the elevation of a foot and a half from the ground, and in this manner were seen to earry it about fifty yards, namely, from the spot where the young birds were set at liberty, to the end of a gravel path, where they entered a clump of fir-trees. In what manner the parents supported the nestling was not very apparent, as the observers did not like to follow too quickly, lest the old birds should relinquish their burden; but from the close vicinity of the three during their flight, it appeared as if they must have upheld it by means of their beaks. The other nestlings had apparently been conveyed away in the same manner, as none of them were to be found."

On the approach of winter the Greenfinches collect in large flocks and resort to stubble-fields, stackvards, and the neighbourhood of farm buildings.

THE HAWFINCH,

(Coccothraustes vulgaris.)

PLATE AL. FIGURE IV.

THE Hawfinch is one of the least elegantly formed and graceful of our British species; "it looks," says Macgillivray, "like a small bird on which has been stuck the head and bill of another double the size." Notwithstanding the clumsiness of its shape, however, the tints and markings of its plumage are so delicate and beautiful, that its general appearance is both handsome and attractive.

Until late years ornithologists described the Hawfinch as merely an oceasional winter visitant to our island, but it is now known to be a permanent resident in several of the southern and midland counties. Undoubtedly great additions are made to the numbers of our own birds by the arrival of flocks from other countries at the commencement of winter. Individuals, probably in most instances from these foreign flocks, have been captured in Yorkshire, Lancashire, Cumberland, and also in Ireland. One or two have been killed in Dumfriesshire, in Scotland. In all the temperate and southern countries of Europe this bird is to be met with; it also occurs, though more rarely, in Sweden, Denmark, Siberia, and Russia.

As may be imagined from the thickness and clumsiness of his shape, the Hawfinch is by no means an active or sprightly bird; when upon the ground his small legs seem scarcely strong enough to support his body, and he moves but slowly, but upon the branches his movements are more rapid. His flight is described as 'swift, undulatory, and noisy, owing to the rapid motion of his wings.' He frequently perches on the topmost branch of a tree, keeping a sharp look-out, and concealing himself most artfully amid the foliage if any intruder appears. He is so extremely shy and wary that the collector has the greatest difficulty in approaching within gunshot, and it is almost impossible to learn anything of his manners without the aid of a glass.

These birds feed chiefly on the larger kinds of seeds and berries. They frequently destroy large numbers of plums and cherries for the sake of the kernels, cracking the stones by means of their powerful bills with such force as to produce a noise that may be heard at the distance of thirty paces. They do considerable damage amongst the green peas both in gardens and fields. In the early part of the year they have been observed catching insects on the wing, especially the common cockchaffer.

The nests of these birds have been found in a variety of situations; on the horizontal branches of large oaks, in thorn bushes and holly trees, and among the branches of horse-chesnut, fir, and apple trees; the height at which they were placed varying from five to thirty feet. They are usually made of small twigs, such as those of the oak and honeysuckle, intermingled with pieces of grey lichen. The eggs are from four to six in number, of a pale olive green, spotted with brownish black, and irregularly streaked with dusky. The young are hatched towards the end of May, and are fed by their parents until their beaks are strong enough to crack the hard-shelled seeds upon which they subsist. "As soon as they are able to provide for themselves," says Mr. Doubleday, "they unite with the old birds in flocks, varying

in numbers from fifteen or twenty to one hundred, or even to two hundred individuals. In this manner they remain through the winter, feeding on the hornbeam seeds which have fallen to the ground, the newly-cracked shells of which are to be seen in abundance at their haunts."

The Hawfinch sometimes utters a few soft, plaintive, and agreeable notes, bearing some resemblance to those of the Bullfinch. Its call is sharp and unpleasant, and is likeued by Bechstein to the syllables 'Itz! tziss!'

The male weighs about two ounces, and is a little over seven inches in length. The bill is blue in summer, and flesh-coloured in winter. The irides are light grey, and the legs, toes, and claws brownish red. The head and neck are fawn-colour, the latter crossed behind by a broad band of ash grey. The throat and the space between the beak and the eye are black. The back is rich chesnut above, fading into brownish grey, and then changing downwards into yellowish brown. The tail is black, with the two centre feathers grey at the tips, and the outer ones partly edged with white. The wings are for the most part black, with a broad band of white running across them, and the quill feathers tipped with steel-blue. The breast and under parts of the body are pale yellowish brown. The female is a little smaller, and considerably paler in colour.

THE GOLDFINCH,

(Carduelis elegans.)

PLATE XI. -- FIGURE V.

The Goldfinch is undoubtedly one of the most beautiful of our British birds, and well deserves the title of *elegans* (elegant), for not only is his plumage brilliantly coloured and handsomely marked, but his shape is remarkably graceful and compact. Besides his personal appearance, his sprightly manners, docile disposition, and sweet song combine to make him a universal favourite.

This bird inhabits a very large extent of country, being distributed over the whole of Europe, a large part of Asia, and the north-western portion of Africa. It is also found in the Canary Isles, Madeira, and Cuba. In the British Isles it is to be met with in numerons localities throughout England and Wales, and is plentiful in many parts of

Ireland and the south of Scotland. Its favourite resorts are wooded districts, open fields, commons, and heaths, but it often visits orchards and gardens, especially in the early part of the year.

It frequently builds in orchard and other trees, and sometimes in hedges, thick bushes, and evergreens in plantations. The nest, which is often placed at a height of five and twenty feet from the ground, is a beautiful specimen of bird architecture, and is most carefully concealed. The female usually constructs it with but little assistance from her partner, who generally perches on the nearest twig and sings gaily while the work is in progress. The outer wall consists of grass, moss, lichens, small twigs, and roots, interwoven with wool and hair. and the interior lining is made up of the down of various plants, feathers, and other soft substances, all laid in with the greatest regularity. Herein are deposited four or five delicate thin-shelled eggs, of a pale grevish blue or bluish white, marked with a few spots of grevish purple and brown, and occasionally a few dark streaks. They are laid about the end of May, and hatched in thirteen or fourteen days. The female rarely leaves the nest, and is fed by her mate. The young are reared on caterpillars and small insects, and when able to fly may be seen in company with their parents, roving over the commons and uncultivated lands in search of the seeds of the thistle, plantain, groundsel, and other plants. A prettier sight than one of these little family parties cannot well be imagined; they flit about in the most graceful manner, and cling to the stems head downwards, and in all kinds of queer attitudes, scattering the down from the thistle heads all around them as they pick out the seeds by means of their long pointed beaks.

The song of the Goldfinch, which may be heard from the end of March to the middle of July, is very sweet and varied. The ordinary call note is represented by the words 'tizjlit,' or 'stichlit.'

Goldie, Goldspink, King Harry, Redeap, and Proudtail are some of the popular names that have been bestowed on this beautiful little bird of which we have now to describe the plumage, etc. The male is about five inches in length; the irides are dark brown; the legs and toes flesh-colour, and the claws brown. The front of the head is crimson, and the same colour extends from the base of the beak underneath the eye. The crown, and a semicircular band running down the sides of the neck, are black. The space between the black line and the crimson is white, which also extends round the throat. The whole of the under surface of the body is dull white, tinged on the sides with wood brown. The back is reddish brown on the upper parts and yellowish on the lower. The tail is black, tipped with

white. The wings, which are also black, are crossed by a band of brilliant yellow, so that when expanded they present a most beautiful appearance:—

"Like fairy fans of golden spokes they seem."

All the quills are tipped with white. The female is a little over four inches and three quarters in length, and has her plumage less brightly coloured.

Goldfinches are very docile, and may be taught a variety of simple but amusing tricks. At an exhibition which took place in London some years ago, several of these birds, with Canaries and Linnets, went through a wonderful performance. One feigned death, and was held up by the tail or claw, without exhibiting any signs of life; a second stood on its head with its feet in the air; a third imitated a Dutch milk-maid going to market with pails on her shoulders; a fifth appeared as a soldier, and mounted guard as a sentinel; a sixth assumed the part of a cannoneer, wearing a cap on its head, and carrying a gun on its shoulder, and a match in its claw, with which it discharged a small cannon. The same bird also acted as if it had been wounded, and was wheeled in a barrow as if to convey it to an hospital, after which it flew away before the company. The seventh turned a kind of windmill; and the last bird stood in the midst of some fireworks, which were discharged all round it, without exhibiting the slightest symptom of alarm. It is always to be feared that when birds perform such elaborate tricks as these they have been taught by means of some method of eruelty or torture, and therefore, for our own part, we would rather see them without these accomplishments.

THE BULLFINCH,

(Loxia pyrrhula.)

PLATE XI .- FIGURE VI.

This species is to be met with throughout England, Ireland, and Scotland, frequenting woods, plantations, thickets, hedgerows, gardens, and orchards, but avoiding bleak and exposed situations, such as commons or moors. On the continent of Europe it is found in Nor-

way, Sweden, Denmark, Russia, Germany, and France. It also occurs in Asia, both in Tartary and Japan.

The scientific name of this bird is derived from loxos, oblique or transverse, and pyrros, red; the first has reference to the shape of its bill, and the second to the colour of its throat and breast. The short thick neck, large head, and stout body of the Bullfinch render him rather clumsy and awkward in appearance, but his plumage is so rich and beautiful, that he is, notwithstauding, a really handsome fellow, and a great ornament to our woods. Should you wish to observe his habits in his native haunts, you must endeavour to approach him so quietly that he may not notice you, as he is extremely shy and vigilant, and will flit off on the slightest disturbance. He is very active in his movements among the branches, and can fly with moderate rapidity, but hops on the ground in a rather ungainly manner.

The call-note of this bird is a soft and plaintive whistle, but it has a rather sweet and pleasing, though simple song. "In the distance the sound of the male's voice is soft and mellow; that of the female greatly resembles it, though they are readily distinguished by a practised ear. Whilst uttering this a smart twitch of the tail may be observed, and when the female is on the nest, her mate frequently sits for hours together on a neighbouring branch, sounding his plaintive note, or amusing her with his curious whining song. While singing it puffs out its plumage, and makes strange contortions with its head."

The Bullfinch feeds on the seeds of the groundsel, chickweed, and other plants, hips and haws, berries and fruits. The gardeners call him 'Pick-a-bnd,' because he commits sad havoc among the flower-bnds of the fruit-trees and gooseberry bushes. Whether he destroys them to get at the insects they often contain, or for their own sakes, is a disputed point. Neville Wood believes the former to be the ease, but very strong evidence derived from the examination of the stomachs of some of his species killed 'in the very act,' almost compels us to accept the latter supposition as the correct one, although Macgillivray says that, "judging from the structure of its digestive organs, it is doubtful that such crude vegetable matters as buds could afford it sufficient nourishment."

The nest of the Bullfinch is usually placed at no great height from the ground in a hawthorn or other bush. It is not unfrequently built on the lower branches of some tree in a shrubbery. The exterior wall consists of small twigs, rather loosely compacted, and it has a lining of fine fibrous roots. The eggs, four or five in number, are of a bluish or purplish white colour, spotted and streaked with purplish grey and dark purple. They are hatched about the end of May, after an incubation of fifteen days. As a rule the slightest disturbance will cause the nest to be deserted; but it is recorded in "The Naturalist," by W. II. R. Read, Esq., of Frickley Hall, in Yorkshire, that a Bullfinch, which had built in a laurel bush near the house, allowed herself to be caressed while sitting on her young ones, and would feed from the hand without exhibiting the least fear. The nestlings are at first fed upon insects, but afterwards on seeds, the hard coverings of which have been removed by the parents.

One of the most interesting traits in the character of the Bullfinch is its strong attachment to its species. A naturalist states that when one of a small flock is killed, the others cannot endure leaving their companion on the ground, and will make every effort to take the body with them.

The male is from six to six and a half inches in length. The bill, which is very short and thick, is shining black. The irides are dark brown; the legs, toes, and claws purple brown. The whole of the top of the head and a band at the base of the beak are jet black. The back is delicate bluish grey, and white towards the tail. The tail and wings are black, the latter crossed by a bar of white. The checks, throat, and breast are a beautiful red between lake and vermilion. The female is considerably smaller than the male, and of a similar colour, but less bright. The young resemble the female, but are without the black head.

In some parts of Germany hundreds of young Bullfinches are captured for the purpose of training them, and teaching them to whistle different airs. They undergo a nine months course of instruction, and are then exported to London, Paris, and other great cities, and sold at prices varying according to their proficiency. Some will whistle two or even three tunes without missing a note, and are worth several pounds.

IN CONFINEMENT.

The Germans value the Chaffinch so highly that we are told a cow has been given in exchange for a particularly fine singer. Probably few of our readers would be willing to make such an exchange if they had it in their power to do so, especially as a well-trained bird can be purchased at any time from the dealers for from six to eight shillings. In confinement Chaffinches should be fed chietly on rape-seed that has been well soaked in water. "A little hemp in spring,"



FINCHES.

1 haffinch. 2. Mountain Finch. 3. Greenfinch. 4. Hawfinch. 5. Goldfinch. 6. Bullfinch.



says Bechstein, "has a great effect in inducing these birds to sing; but they are so fond of it as to render it advisable not to put it in the same trough with the rape-seed, which they would waste to get at their favourite food. A little green food, especially groundsel, and in winter a slice of apple aids the process of digestion." Old Chaffinches frequently become lame in consequence of the accumulation of scales on their legs; these may be removed by means of the point of a penknife, an operation requiring considerable care and delicacy.

The Mountain Finch will thrive if treated in the same manner as the Chaffinch, but its song is not particularly agreeable, and it is very much given to quarreling over its food if kept in an aviary with other birds.

The Greenfinch is an unusually hardy bird, and may be kept to the age of ten or twelvo years. If coufined with or near the Chaffinch it soon acquires its song, which is much sweeter and more varied than its own. The young may be reared if fed upon white bread, soaked in milk and mixed with a small quantity of bruised hemp and rape-seed. As they grow up they should be fed chiefly on the latter.

The Hawfinch becomes very tame in confinement, but is a delicate bird, and very liable to take cold. It should be given the same food as the last-mentioned species.

The Goldfinch is much prized as a cage-bird, both on account of its beautiful plumage and sweet song. It should be kept in a large and roomy cage, open on all sides, but with a close wooden or zinc top. When taken from the nest it may be reared on poppy-seed and bread soaked in milk or water. It should afterwards be fed on canary, rape, hemp, or poppy-seed, especially the latter. Let it have plenty of water both fer bathing and drinking, and an occasional supply of groundsel or other green food. The Goldfinch is rather subject to epilepsy, a disease brought about by over-feeding and want of exercise. Bechstein says the best remedy is to dip the bird affected once or twice in the coldest water that can be procured, and then to cut the claws so closely as to let blood. Sore and swollen eyes are disorders from which this bird semetimes suffers; they may generally be cured by an application of unsalted butter.

The Bullfinch rarely lives beyond six or seven years in confinement; but the remarkable talents he displays in learning to whistle or 'pipe' various tunes, and his tameness and decility render him an especial favourite with the lovers of eage-birds. The young of this species may be reared on soaked bread and bruised hemp-seed. They must be fed about every two hours from six in the morning until dark, and kept very warm. "If they are to be taught to whistle," says Bechstein,

"they must be taken out of the nest when twelve or fourteen days old, and fed on soaked rape-seed, mixed with wheaten bread. They do not begin to whistle till they are able to feed themselves; but must nevertheless be whistled to, as soon as taken, as in this case the lesson is more deeply and readily impressed upon their memory. They are most attentive and capable of learning immediately after they have been fed. The course of instruction must last at least three quarters of a year. Even when they have been taught, it is well to keep them apart from other birds, as they are so quick at learning, as readily to catch up any novelty. It is also necessary to help them when they hesitate, and to repeat their song to them, especially at moulting time." Adult birds will thrive on canary, rape, or hempseed. If allowed free range of the aviary, (and this applies to all the species in our present group,) the universal paste, varied with a little rape-seed, will snit them perfectly.

"Goldfinch, pride of woodland glade, In thy jet and gold array'd; Gentle bird, that lov'st to feed On the thistle's downy seed; Freely frolic, lightly sing, In the sunbeam spread thy wing! Spread thy plumage, trim and gay, Glittering in the noontide ray! As upon the thorn-tree's stem Perch'd, thou sipp'st the dewy gem. Fickle bird, for ever roving, Endless changes ever loving; Now in orehards gaily sporting, Now to flowery fields resorting; Chasing now the thistle's down, By the gentle zephyrs blown, Lightly on thou wing'st thy way, Always happy, always gay."

FINCHES AND ALLIED SPECIES.

THE Siskin, the smallest species in our present group, is very similar in structure to the Goldfinch, and belongs also to the genus Carduelis. These birds, commonly called Thistle-finches, feed entirely upon seeds, principally those of the various kinds of weeds, thus performing valuable service to the agriculturist. They have shortish and sharply-pointed beaks, rather slender bodies, and longish wings. The Siskin, with which we are now chiefly concerned, is a winter visitor to this country from the northern parts of Europe, but has in a few instances been known to remain and breed here.

The Linnet, Redpole. Mealy Redpole, and Twite, form a separate genus, taking its name from the first mentioned. The *Linariæ* are neat and lively birds of small size, most of them permanent residents in Britain. Their heads are rather large, necks short, wings long, legs short, and toes slender. The Linnet is the most common, being found in all parts of the country throughout the year, while the Mealy Redpole is the rarest, and only a winter visitor.

The Sparrows, belonging, as we have previously stated, to the genns Passer, are very closely allied to both the true Finches and the Linnets. The House Sparrow is of all British birds the most common and familiar; he is to be met with from one end of the country to the other, but always close to the habitations of man. Barry Cornwall says concerning him—

"He doth follow us
From spot to spot, amidst the turbulent town,
And ne'er deserts us. To all other birds
The woods suffice, the rivers, the sweet fields,
And nature in her aspect mute and fair;
But he doth herd with man.
Untiring follower! what doth chain thee here?
What bonds 'tween thee and man? Thy food the same
As theirs who wing the woods,—thy voice as wild,
Thy wants, thy power the same; we nothing do
To serve thee, and few love thee; yet thou hang'st
About our dwellings, like some humble friend,
Whom custom and kind thoughts do link to us,
And no neglect can banish."

The Tree Sparrow is chiefly confined to some of the midland and northern counties of England. Contrary to the habit of its more plentiful relation, it seems rather to avoid the neighbourhood of towns and villages, and to prefer wild hilly and mountainous districts. Both of these birds feed on seeds and grain, but their depredations on the latter are amply compensated by their wholesale destruction of insects, especially when they are rearing their young. They breed several times in a season, building rather rude and loosely-compacted nests, but lining them plentifully with teathers and other soft materials.



FINCHES, ETC.

I. Siskin, ... Linnet, ... 3. Redpole, ... 4. Mealy Redpole, ... 5. Twite, ... 5. Fragrow, ... 7. Tree Sparrow,



THE SISKIN,

(Carduelis spinus.)

PLATE XII.- FIGURE I.

Although the Siskin is not so brilliantly coloured as the Goldfinch, it is a beautiful bird, and particularly neat and compact in form. The male, which a good deal resembles the green variety of the Canary, is about five inches in length, and nine inches across the expanded wings. The bill is light grey, and blackish at the point. The irides are dusky brown; the legs, toes, and claws pale reddish brown. The upper part of the head, chin, and throat are black. A pale yellow band extends over the eye and for some distance backwards. The neck, checks, and back are yellowish green, the latter speckled with black. The wings and tail are black, with many of the feathers edged or tipped with yellow. The breast is greenish yellow, fading into whitish on the under surface of the body. The female is a little smaller than the male, and her plumage is in general paler. The head and back are greyer and more spotted with black.

This species is found throughout the continent of Europe, but is most plentiful in the mountainous districts of Norway, Sweden, and Russia. It visits this country in large flocks about September, and takes up its abode chiefly in the northern parts, although considerable numbers have occasionally been met with in the south. A few individuals have been known to remain throughout the year, and to breed both in England and Scotland. A nest containing three young birds was found in Camperdown woods near Dundee; it was placed at the height of about six feet from the ground, at the insertion of a branch, and close to the trunk of a spruce fir, and was composed of materials similar to those used by the Chaffinch. Another was discovered in a similar position near Bathgate: Mr. Weir says it was one of the best concealed nests he ever saw. Mr. Yarrell mentions two instances in which this bird has been known to breed near London, and Mr. Meyer, two others, both in Coombe Wood, in the same neighbourhood. In Germany, Bechstein tells us, the Siskin "prefers building in forests of

pine or fir, and places its nest on the highest branch of one of these trees, or sometimes on the bough of the alder. It is fastened to the branch with spiders' webs, coral-moss, and threads from the cocoons of various insects, and is eleverly constructed of these materials, woven together with small twigs, and lined with very fine roots." The eggs vary greatly in size, shape, and colour, but are in general of a greyish or greenish white, spotted around the larger end with purple and brown. The female, without any assistance from her mate, sits on the eggs for about fourteen days; the young are fledged in fifteen more, and are able to leave the nest at the end of the third week. Two broods are generally reared in a season.

The food of these birds consists of the seeds of the fir, pine, beech, alder, thistle, dandelion, and other trees and plants. They cling to the branches and stems, and exhibit the same nimbleness and activity as the Goldfinches. The song of the male, although little more than a continuous chirrup, is sweet and pleasing. The flight of the Siskin is light, rapid, and undulating, but it rarely remains long on the wing in this country. On the ground it hops with considerable rapidity.

This bird is sometimes called the Aberdevine, or the Black-headed Thistle Finch. Its scientific title is derived from *carduus* a thistle, and *spinus* a thorn.

THE LINNET,

(Linaria cannabina.)

PLATE XII .- FIGURE II.

THE tints of the plumage of this species undergo such great changes at different seasons and periods of life, that it has been called by the various names of the Brown, Grey, White, and Rose Linnet. It is also known as the Whin Linnet, the Greater Redpole, and the Lintie. Its scientific title is derived from *linum* flax, and *canna* a cane or reed.

The Linnet is plentiful in uearly all parts of the European continent, a large portion of Asia and Asia Minor, and in north-western Africa. It is well known throughout Britain, being as common in the Orkney and Shetland Islands as in the southern counties of England. During the summer these birds frequent open commons, moors, and the borders

of woods and plantations, where they may be seen feeding on the seeds of tlax, daudelion, thistle, and other plants. The pairing season commences early in April; the nest is neatly constructed of grass and small twigs, intermingled with moss and wool, and lined with hair. It is usually placed in the centre of a thick furze bush or a clump of brushwood, close to the ground, but has been found in a fir tree, at the height of ten or cleven feet. The eggs are from four to six in number, of a bluish white colour, spotted, most thickly at the larger end, with purplish grey and reddish brown. When the young are hatched the parents exhibit great solicitude for their safety, and will use various artifices to attract an intruder from the vicinity of the nest.

The "Edinburgh Philosophical Journal" gives the following interesting anecdote, showing how the natural timidity of a pair of these birds was overcome by their affection for their offspring:-"A nest, containing four young Linnets, scarcely fledged, was found by some children, who resolved to earry them home, for the purpose of rearing and taming the young birds. The old ones, attracted by their chirping, continued fluttering round the children till they reached the house, when the nest was earried upstairs to the nursery, and placed ontside the window. The old birds soon afterwards made their appearance, approached the nest, and fed the family, without showing alarm. This being noticed, the nest was soon afterwards placed on a table, in the middle of the apartment, and the window left open. The parent birds came boldly in, and fed their offspring as before. Still further to put their attachment to the test, the nest and young ones were placed within a bird-cage; still the old ones returned, entered boldly within the cage, and supplied the wants of their brood as before, and, towards evening, actually perched on the cage, regardless of the noise made around them by several children. This continued for several days, when an unlucky accident put an end to it. The cage had been again set on the outside of the window, and was unfortunately left exposed to a sudden and heavy fall of rain; the consequence was, that the whole of the young were drowned in the nest. The poor parents continued hovering round the house, and looking wistfully in at the window, for several days, and then disappeared."

The young are generally able to fly by the end of May, and two broods are commonly reared every year.

As soon as the breeding-season is over, the Linnets collect in large flocks, and leaving the breezy heath and moorland, resort to the lower districts, where they search the stubble-fields for the fallen grain, or visit the farmers' stackyards to pilfer from his store. So large are these flocks, especially in mid-winter, and so closely do the birds keep

together, that it is recorded that upwards of one hundred and forty were on one occasion killed at a single shot.

The flight of this bird is light, rapid, and undulating; Macgillivray says, "the flocks glide and wheel, the individuals crossing the direction of each other, in a very beautiful manner." On the ground it advances by short leaps, in a quick and sprightly manner.

The song of the Linnet is soft, mellow, varied, and sweet.

The length of the adult male is about five inches and three quarters. During the spring he appears in his brightest colours. The forehead and breast are then of a beautiful crimson. The rest of the head, neck, and sides of the throat are grey. The back and wing coverts are rich chesnut brown, and the tail feathers and quills black, with narrow white edges. The under part of the body is pale wood brown. The bill bluish grey, and the feet dull brown. During the autumn and winter the bright red on the head and breast is replaced by dark brown. The female is a little smaller than the male, and of a lighter colour.

THE REDPOLE,

(Linaria minor.)

PLATE XII. FIGURE III.

This elegant little bird, also called the Lesser Redpole and the Smaller Redpole Linnet, is the smallest British member of the Passerine family, being rather less than five inches in total length. It remains throughout the year in Scotland, Ireland, and the north of England, but is frequently met with in the south during the winter. On the continent of Europe it inhabits Norway, Sweden, Siberia, and other northern countries, and is a winter migrant to the southern parts.

Like the Common Linnet, the Redpole has the forehead and breast bright crimson during the breeding-season. The general colonr of the upper parts is yellowish brown, streaked with blackish brown. The wings and tail are dusky brown, edged with pale yellowish brown, the former crossed by two bands of the same. The under surface of the body is whitish.

In Scotland, the Redpole is said to breed in the hilly districts, among the brushwood that skirts the flanks of the mountains or

covers the margins of streams. The nest is placed in a low bush or tree, such as the alder, willow, or hazel, and is composed of moss and dry grass, with a lining of willow catkins and feathers. On this soft bed are deposited from four to six eggs, of a pale bluish green colour, spotted chiefly at the larger end with orange brown, with occasionally a few fine streaks of blackish brown. Pennant says, "We found the nest of this species on an alder stump near a brook, between two and three feet from the ground; the bird was sitting on four eggs, and was so tenacious of her nest, as to suffer us to take her off with our hand; and we found that after we had released her she would not forsake it."

These birds feed on the seeds of the alder, thistle, dandelion, and other trees and plants; they have sometimes been seen picking young buds in pieces, probably to get at the small insects they so frequently contain. When feeding they may be watched with the greatest ease, as they will allow an observer to come within half a dozen yards without attempting to fly away. Even when fired at they only rise into the air and wheel about several times, returning in a few seconds to the tree or bush from which they started. Andubon says, "Few birds display a more affectionate disposition than the Little Redpole, and it was pleasing to see several on a twig feeding each other by passing a seed from bill to bill, one individual sometimes receiving from his two neighbours at the same time."

The song of the Redpole is clear and loud, but without much variety; it may be heard chiefly during the pairing season. Its call-note is rather shrill, and is frequently repeated when on the wing.

THE MEALY REDPOLE,

(Linaria borealis.)

PLATE XII .- FIGURE IV.

THE Mealy Redpole very closely resembles the species last described, indeed it was for some time looked upon as merely a large variety of the same. At the present time, however, most ornithologists believe it to be distinct and identical with a species that is found in the northern parts of Europe, Asia, and America.

In this country it is in general very rare, but a large number are said to have been taken in the year 1827, and again in 1829. Several specimens were obtained near Colchester in January, 1836; when shot they were feeding on the seeds of the alder, in company with Siskins. Another specimen was killed in the neighbourhood of Saffron Walden, in the month of May, of the same year. Others have been met with in Yorkshire, Suffolk, and other parts of the country, most of them in winter.

The eggs of this bird are described as pale greenish blue, sprinkled all over with pale but distinct spots of a reddish brown colour, some of them inclining to lilac, chiefly confined to a zone around the larger end.

In its habits this species is said to resemble the Common Redpole. Its food consists of the seeds of various forest trees.

THE TWITE,

(Linaria montana.)

PLATE XII .- FIGURE V.

THE Twite is to be met with chiefly in hilly and mountainous districts, and is therefore very commonly called the Mountain Linnet. In size it stands intermediate between the Common Linnet and the Redpole, and in general appearance it bears some resemblance to both these birds; it may, however, be readily distinguished by its more clougated and slender form, the tawny tint of its throat, and the absence of the red colour on both the forehead and breast.

This bird inhabits Denmark, Norway, and Sweden, but is said to be rare in Russia. During the winter it visits Germany, France, and even Italy, and is stated to be a permanent resident among the Swiss Alps. It is also found in Japan, where, according to M. Temminck, it is known by the name of Tuzume. It is plentiful throughout the year in all the northern parts of the British Isles, but is only a winter visitor to the southern counties of England.

In its habits the Twite closely resembles the Linnet, with which it sometimes associates during the winter, the individuals of both species

uniting to form large flocks, which visit the lower grounds and stubble fields in search of seeds and grain. Macgillivray states that it feeds largely on the seeds of the cultivated grasses, and that he has found the contents of the stomachs of those shot to consist almost entirely of such.

Early in the spring the flocks break np, partners are selected, and building operations commenced. The nest is placed on the ground, among heath or gorse, on the rugged slopes of the mountains. It is neatly constructed, and consists externally of dry grass, small roots, heather, and moss, and is lined with wool, hair, and a few feathers.

The eggs rarely exceed six in number, and are of a pale greenish or bluish white, marked chiefly at the larger end with light reddish brown and purplish red, with sometimes a few blackish dots. Only one brood is usually reared in a season.

The ordinary note of this bird resembles the word twite, hence its name. Mr. Selby says its song is pleasing, though searcely equal in compass to that of the Common Linnet.

The Twite flies rapidly, and in an undulated manner; before alighting it wheels around several times, uttering a soft twitter at intervals. It is by no means a shy bird, but if disturbed generally betakes itself to lofty trees, or to some distant field.

THE SPARROW,

(Passer domesticus.)

PLATE XII, -- FIGURE VI.

The Sparrow, to which the appellation of the word common is more appropriate than to any other British bird, is as well known to the inhabitants of the greater part of the European continent as to ourselves. The dark-skinned dwellers in the northern parts of Africa, and the Asiaties of the districts bordering on the Himalaya Mountains, are also well acquainted with his bold, pert, and familiar ways. Over a large portion of the globe, wherever man rears his habitation, be it the mud cottage of poverty, or the marble palace of royalty, this little bird takes up its abode also, building its nest and rearing its young in the thatch of the former, or among the sculptured ornaments of the

latter. "A village without Sparrows," says Macgillivray, "has as desolate an aspect as a house without children; but fortunately for the world, the one is nearly as rare as the other. Multitudes of these birds in a place are indicative of its prosperity, for where there are few crumbs there will be few beggars."

A description of the plumage of the Sparrow would be quite unnecessary, and indeed almost an insult to the powers of observation of our readers, but we may remark, that the country bird, with the rich brown of the upper parts of his body, the black of his throat, and the white bands on his wings, bears but little resemblance to the dingy smoke-begrimed inhabitant of the city.

Although the Sparrow exhibits so little fear of man that it will permit his approach to within a few feet, it is at the same time very wary and alert, and no sooner catches sight of an elevated gun, or even a stick held in a similar position, than it darts off to what it considers a safe distance. "It is often remarked," says Bishop Stanley, "what impudent birds are London Sparrows! and not without reason. Born and bred in the bustle of the town, they must either live and jostle with the crowd, or look down from the house-tops and die of hunger. Naturally enough, they prefer the former; and all our London readers will, we are sure, testify to the cool intrepidity with which this familiar bird will ponnce upon a bit of bread, or some other tempting morsel which happens to catch its eye upon the pavement, and with what triumph and exultation it bears it off to its mate, seated on some window-sill or coping-stone above, or followed, perhaps, by three or four disappointed companions, who were a moment too late in seizing the spoil. A Sparrow is not only bold with regard to men, but still more so on particular occasions towards other birds. On the edge of a certain lawn grew a close thick bush. On this lawn, amongst others, the Blackbirds used to come and forage for worms. One day a person happened to be looking at a Blackbird in the act of making off with a prize, when a Sparrow, darting from the thick bush, instantly assailed the Blackbird, and compelled him to drop the worm, of which he took immediate possession. So singular a circumstance induced the observer to look out now and then when Blackbirds came, and he frequently saw the same piratical practice adopted by the Sparrow, who thus, by keeping watch in the bush, was enabled to enrich himself on the labours of the larger bird."

At the pairing season a great deal of fighting and quarrelling takes place, although blood is rarely spilt. A battle commenced by two rival males is often taken part in by half a dozen of the spectators; all of them apparently pecking at each other indiscriminately, and

twittering and screaming at the top of their voices, as they whirl about from one spot to another. The nest, which is usually placed in any holes or cavities which will afford it sufficient support or shelter, in the roofs or other parts of buildings, but sometimes in trees and bushes, is composed of hay, straw, mass, and small twigs, and plentifully lined with wool, feathers, and other soft materials. It is very closely constructed, and often measures as much as six inches in diameter.

Sparrows sometimes place their nests in the most curious and apparently unsuitable positions. A pair once built in the hollow of the lock attached to the entrance gates of the Hanwell Lunatic Asylum: the fact that these gates were locked and unlocked rarely less than three hundred times in the course of a day, renders the circumstance especially remarkable. The eggs were laid, and the young successfully reared. Another pair built in the mouth of the lion over Northumberland House, at Charing Cross. Mr. Morris records how a still more extraordinary place was chosen by a north-country couple:-"A coal vessel from Newcastle put into Nairn, in Scotland, and while there two sparrows were frequently observed to alight on the top of the vessel's mast, while she remained in port. This occasioned no great surprise to the crew; but after putting to sea, the two Sparrows were seen following the sloop, and having come up with her, resumed their posts at the top of the mast. Crumbs of bread were scattered upon the deck, with a view of enticing them down, of which they soon availed themselves; and after eating heartily, they again returned to the mast-head. By the time the vessel had been two days at sea, they became much more familiar, and descended boldly for the purpose of feeding. The voyage was a long one, lasting for some days, when on reaching the river Tyne, to which they were bound, the nest with four young ones was carefully taken down, and being put in the crevice of a ruined house, on the banks of the river, they continued to rear their brood." Another curious situation selected by a pair of those birds was a thorn bush, stuck in the top of a kitchen chimney; here, notwithstanding the smoke that was constantly issning, the eggs were laid and the young reared.

The eggs, from four to six in number, are dull greyish or purplish white, spotted with dark grey and brown. The male and female sit alternately on the nest for thirteen or fourteen days, by the end of which time the young are hatched. Three broods are frequently produced in a season. Both parents feed the young on insects, and exhibit the strongest attachment to them. Mr. Graves relates that having noticed a pair of old birds that had built close to his house,

continuing to bring food to the nest some time after the brood had left it, he had the curiosity to place a ladder against the wall, and to look into the nest. To his surprise he found a full-grown bird, which had got its foot entangled in some thread that formed part of the nest. It was doubtless one of the young which had been thus prevented from leaving with the rest of the brood. Wishing to see how long the parents would continue to feed it, he allowed it to remain as it was, and observed that it was supplied by them until after Christmas, when, fearing the cold would kill it, he released it. In a day or two it went with the old birds, but they continued to feed it till March, and during the whole time they all nestled together.

"A few years ago," says Mr. J. Blaydon, of Pontypool, in the pages of the "Zoologist," "I was sitting in a cottage, when my attention was attracted to an unusual screaming of a small bird. I immediately went to the back door, and saw that it proceeded from a Honse Sparrow, that was fluttering about on the wall, at the base of which was a duck with something in its bill, which it was endeavouring to swallow. Upon attentively observing it, I found this to be a callow nestling, and from the agonics of the poor Sparrow there was no mistaking the parent; the feathers of the latter were all erect, and it continued hopping and fluttering about, and uttering the most distressing cries for the loss of one of its young, which I suppose had fallen out of the nest."

When the corn is standing in the fields, the Sparrows may frequently be seen picking the grains from the ears; they also feed on the field and garden peas, and the seeds of the charlock, mustard, groundsel, and other plants. The loss occasioned to the crops by the depredations of these birds has often caused the farmers to wage war with them, but, as they are now beginning to find out, to their own cost; for in those districts where, through the agency of Sparrow Clubs and other organized systems of destruction, these useful creatures have been exterminated or greatly reduced in numbers, the insects have increased to such an alarming extent as to threaten the destruction of all vegetation. The fact that the number of caterpillars alone captured by a single pair of these birds for the support of their young, is estimated by competent authorities at not less than four thousand a week, will help us to understand how they must repay the farmer a thousand-fold for the grain they pilfer from him. But, besides this, the old birds themselves feed largely on all kinds of insects, they free the beans from aphides, and may be frequently seen darting on the common white butterfly when she settles for the purpose of depositing her numerous eggs on the cabbages, etc. In the flower garden too they

do good service in destroying the carwigs and other pests that hide among the petals of the dahlias, polyanthuses, and other plants. They also devour large quantities of slags and snails.

The note of the Sparrow is a monotonous and rather harsh and shrill chirp; when a number of individuals are collected on a tree or house-top, the effect of their united voices is by no means agreeable to the ears of man, although they themselves for anght we know may regard the result of their efforts as most harmonious and delightful.

A curious anecdote of the Sparrow is related in the "Naturalist's Magazine."-"A lady, living in Chelsea, was extremely found of birds, of which she kept a considerable number in cages. Amongst others she had a Canary, which was a particular favourite, but the londness of his note often obliged her to put him outside of her window, in some trees which were trained up in the front of her house. One morning, during breakfast, when the cage was there placed, a Sparrow was observed to fly round about it, then perch upon the top, and twitter to the bird within, between whom and itself a sort of conversation seemed to ensue. After a few moments he flew away, but returned in a short time, bearing a worm or small grub in his bill, which he dropped into the cage, and immediately flew away. Similar presents were received day after day, at the same time, by the Canary from his friend the Sparrow, with whom at length he became so intimate that he very often received the food thus brought into his own bill from that of the Sparrow. The circumstance attracted the notice of the lady's neighbours, who often watched these daily visits; and some of them, to try the extent of the Sparrow's kindness, also hung their birds out at the window, when they found them also fed; but the first and longest visit was always paid by the Sparrow to his original friend,"

THE TREE SPARROW,

(Passer montanus.)

PLATE XII. - FIGURE VII.

The Tree or Mountain Sparrow very closely resembles the common species, but may be very readily distinguished by its smaller size. It is a common bird in Holland, France, Spain, and Italy, and is

also found in Norway, Sweden, Lapland, and Siberia. In Asia it has been met with in Japan, China, and the northern parts of India. In the British Isles it is in general rather rare, but is found in Norfolk, Suffolk, Essex, Cambridgeshire, Rutland, Lincolnshire, Yorkshire, Durham, and Northumberland. It is said to be not uncommon in Shropshire, and has been observed in Lancashire about Chat Moss.

This species is not nearly so bold and familiar as its more common relative; it rarely approaches towns or villages; unless compelled by the severity of the weather to resort thither through lack of food elsewhere. Its home is among the hills and mountains, as indicated by its specific name, (montanus, from mons, a mountain,) and it builds chiefly in holes in the trees which frequently skirt their bases, but sometimes, in thoroughly country places, in the thatch of barns and outhouses, and in stacks of wood and faggots. The nest is formed of hay rather loosely put together, and is lined with wool, down, and feathers. The little Tree Sparrow has been known to take possession of the old nest of the Magpie or Crow, doming it over, and otherwise adapting it to its requirements. The first eggs are laid in March; they are from four to six in number, and of a dull white, speckled all over with different shades of light greyish brown. Both parents share in the duties of the nest, and the young are hatched in thirteen or fourteen days. It is said that this bird frequently pairs with other species, and that when this occurs the male is a Tree and the female a Hedge Sparrow.

The common note of this bird is described as not unlike that of the House Sparrow, but rather more shrill. Its song, if such it may be called, "consists," says Mr. Blyth, "of a number of chirps, intermixed with some pleasing notes, delivered in a continuous unbroken strain, sometimes for many minutes together, very loudly, but having a characteristic Sparrow-like tone throughout."

During the spring and summer the Tree Sparrow feels on insects and soft vegetables, supplying its young with the same; for the remainder of the year it lives on seeds and grain.

IN CONFINEMENT.

THE London bird-catchers ask rather a high price for the Siskin both on account of its rarity and its value as a pairing bird with the Canary, the joint offspring being remarkable for the softness and sweetness of their seng. If kept in a cage, it should be fed on poppy and canary seed, mixed occasionally with a small quantity of crushed hemp seed; but if allowed the free range of the aviary, it will thrive on the universal paste. It requires a plentiful supply of water both for drinking and bathing purposes.

The Linnet is a favourite cage bird on account of its rich and flute-like song, and the facility with which it may be taught to whistle various airs. In the latter particular Bechstein says it excels all other birds, and can also acquire the song of the Nightingale, Chaffinch, Lark, etc. Young birds, taken from the nest, may be reared on a mixture of soaked bread crumbs, rape seed, and hard boiled egg. The adults will thrive on rape seed, with an occasional supply of green food. They must never be allowed to eat hemp seed, as it acts upon them almost as a poison, and should be fed sparingly, as they are rather liable to epilepsy. The cage best adapted for them is the small square-cornered kind, known as the Chaffinch's. In confinement these birds lose the beautiful red colour on the head and breast, which is so great an ornament to them when at liberty; indeed if taken very young they never acquire it.

The Redpole becomes very tame in confinement, and can be taught to eat out of its master's hand. It may be kept alive for eight or nine years, and is particularly interesting on account of its affectionate manners, not only towards its own species, but to any birds that it is allowed to associate with. If kept in a cage, it should be given the same food as the Linnet, but if allowed to range the room, the universal paste will agree with it. Both the Mealy Redpole and the Twito will thrive on the same diet.

"If many birds be confined together in a room," says Bechstein,

"it may be worth while to admit a Sparrow or two, especially as they breed freely with the Tree Sparrow. For this purpose, a male of the House Sparrow and a female of the Tree Sparrow must be selected, and placed in some retired corner, provided with a box or artificial nest in which to build." It would be nothing short of cruelty to confine this active and lively little bird in a cage, and we could only countenance his imprisonment in a spacions aviary. He will eat almost anything—seeds and insects of all kinds, or the universal paste; but requires an occasional supply of green meat to keep him in good health. Mr. William Kidd, of Hammersmith, states that the Sparrow will acquire the song of the Canary, if brought up from the nest in the same room with one of these birds that is a good singer, and never allowed to hear the voice of its own or any other species.

The Tree Sparrow rarely lives long in confinement, being very subject to decline. A rusty nail should always be kept in its drinking water.



FINCHES, ETC.

1. Sissin. 2. Linner. 3. Redpole. 4. Mealy Redjood. 5. Twite. 6. Starrow. 7. Tree Sparrow.



GROSSBEAK AND CROSSBILLS.

WE have here a group of visitors to our shores from other lands, not from the tropies, as our readers might infer from the richness of their plumage, and their general resemblance to the parrot tribe, but from cold northern climes, where they make their home in the gloomy forests of pine and fir. Like the species constituting our three previous groups, they are all Passerine birds, but form a separate genus, called Loxia, from the Greek word loxos—curved or oblique, which name has been applied to them with reference to the peculiar shape of their beaks. These birds have large roundish heads, thick necks, stoutish bodies, short and strong legs, and long curved claws. Their wings are rather long, and their tails short.

The Pine Grossbeak is placed by some ornithologists in the genus *Pyrrhula*, with the Common Bullfinch, which it greatly resembles both in the shape of its beak and its general form; but others, following in the steps of the great Linnæus, have included it with the Crossbills, as it agrees with these birds in many of its habits, and also in the colouring and changes of its plumage.

The Crossbills are remarkable for the curious structure of their beaks, the points of the mandibles crossing each other at the extremity, in some specimens from left to right, and in others from right to left. The learned Buffon speaks of this peculiarity as a defect and a deformity, but the investigations of later naturalists have shown that

instead of such being the case, it is a wonderful instance of the perfect manner in which the Creator has fitted everything for the purpose it is intended to accomplish. The Crossbill subsists chiefly on the seeds of the pine and fir, which, being contained in hard scaly coverings, could not possibly be removed by a bird's beak of ordinary construction. In order to obtain them, this bird brings the points of its mandibles together, and thus reduced in compass inserts them between the scales of the cones; then separating the points, forcibly closing the mandibles, and working them sideways, the scales are wrenched open by the points acting in opposite directions. The seeds are then taken out by means of another wenderful organ, the tongue, which is specially adapted for the purpose, by having an additional portion, formed partly of bones, and of a scoop shape, jointed on to the end. The Common Crossbill has been met with in all parts of the British Isles, generally appearing in large flocks, and sometimes doing considerable damage in the apple erchards, but its coming and going are very irregular. In certain years it has been yory plentiful, and in others not a specimen has been seen. The Parrot Crossbill, so named from its remarkably strong, short, and curved beak, is a much rarer visitor to our shores, although it is sometimes mederately abundant in Germany. The remaining species, the American and Two-barred Crossbills, have only been met with in a few instances in this country. As these birds are very similar in general appearance it seems a matter of doubt, with several of the specimens taken, as to which of the two species they really belong.



B-DSSB'AK AND PROSSBILLS.

1. in the beak. 2. Crossbill 3. Farrot Cresbill.

1 Ame.ican White-winged Crossbill. 5. Two-barred Crossbill.



THE PINE GROSSBEAK,

(Loxia enucteator.)

PLATE XIII. - FIGURE I.

This species is a native of Norway, Sweden, Russia, Siberia, and Lapland, and is sometimes met with in France, Germany, and Italy. It is also found in the northern parts of the American Continent. To this country it is but an occasional visitor. A flight was observed on Yarmouth Denes in November, 1822, and Messrs. Gurney and Fisher, in their "Account of the Birds found in Norfolk," state that in two instances individuals attempted to breed in that county. In the first of these cases, the nest, containing four eggs, was said to have been found on the branch of a fir tree, at a height of about three feet from the ground. In the second, the pair of old birds were shot while in the act of building. Other specimens were met with at Harrow-on-the-Hill, in Middlesex, and Hutton, in Lancashire. In Scotland, Pennant says he saw these birds flying above the great forests of Invercauld, in Aberdeenshire, as early as the 5th. of August. The late W. Thompson, Esq., of Belfast, stated that one was shot at Cavehill, in December, 1819.

This bird, frequently called the Pine Bullfinch, very closely resembles the Common Bullfinch in the shape of its beak and its general form. Audubon, the great American ornithologist, who met with it in Newfoundland, on the coast of Labrador, and at Hudson's Bay, says, "The flight of the Pine Grossbeak is undulating and smooth, performed in a direct line when it is migrating, at a considerable height above the forest, and in groups of from five to ten individuals. They alight frequently during the day, on such trees as are opening their buds or blossoms. At such times they are exceedingly gentle, and easily approached. They are exceedingly fond of bathing, and whether on the ground or on branches, move by short leaps. I have been much surprised to see, on my having fired, those that were untouched fly directly towards me until within a few feet, and then slide off, and alight on the lower branches of the nearest tree, where, standing as creet as little hawks, they gazed upon me as if I was an object quite new, and of whose nature they were ignorant." The confiding and unsuspecting nature of these interesting birds causes them to readily

fall into traps and snares, even of the most simple construction. The members of the little flocks appear greatly attached to each other; it is related that on one occasion, when three out of a party of four had been captured in a net, the fourth crept in, in order that it might share the fate of its beloved companions.

The note of this bird, which is only to be heard in perfection from June to August, is described as rich, full, and clear. It sings, in its native land, in the fine summer nights as well as during the day, and is known as "the Watchman."

The nest is usually placed on the branch of a tree, only a few feet above the ground; it consists of small sticks and dry stalks of plants, and is lined with feathers. The eggs, four or five in number, are white or bluish white. The young are said to be hatched in June.

The food of this bird consists of the seeds, berries, and buds of all kinds of trees, and occasionally insects.

The adult male is about eight inches and a half in length, and has the bill dark brown, with the lewer mandible tinged with red. The irides are hazel; the legs and toes blackish brown, and the claws black. The head, neck, and breast are red. The feathers of the back are brownish grey, edged with red. Those of the wings and tail are greyish black, mostly edged with white. The wing coverts are tipped with white. The under surface of the body is grey.

The female is of a greener tint than the male, and has the head and neck yellow instead of red.

The Pine Bullfinch and Greater Bullfinch are other names by which this bird is known. Its specific title is derived from the Latin, enucleator—one that takes out the kernel of a thing.

THE CROSSBILL.

(Loxia curvirostra.)

PLATE XIII .- FIGURE II.

This bird is plentiful in the pine forests of Russia, Siberia, Germany, and Switzerland. It also inhabits Denmark, Norway, and Sweden, where, according to Professor Nilsson, it builds during the winter in the topmost branches of the fir trees. In France, Spain, and Italy it is sometimes abundant.

The Crossbills are very irregular visitors to the British Isles; when

they do come, it is generally in considerable numbers, and at no particular time of the year. An old manuscript, quoted by Mr. Yarrell, seems to be the earliest record of their appearance; it runs as follows: "That the yeere 1593 was a greate and exceeding yeere of apples; and there were greate plenty of strang birds, that shewed themselves at the time the apples were full rype, who fedde uppon the kernells onely of those apples, haveingo a bill with one beake wrythinge over the other, which would presently bore a greate hole in the apple, and make way to the kernells; they were of the bignesse of a Bullfinch, the home right like the henne of the Bullfinch in conlour; the cocke a very glorious bird, in a manner al redde of yellowe on the brest, backe, and head. The oldest man living never heard or reade of any such like bird; and the thinge most to be noted was, that it seemed they came out of some country not inhabited; for that they at the first would abide shooting at them, either with pellet, bowe, or other engine, and not remove till they were stricken downe and killed with often throweing at them with apples. They came when the apples were rype, and went away when the apples were cleane fallen. They were very good meate." The next account is from an old work on "The Natural Rarieties of England, Scotland, and Wales:"-"In Queen Elizabeth's time a flock of Birds came into Cornwall about harvest, a little bigger than a Sparrow, which had bils thwarted crosswise at the end, and with these they would cut an apple in two at one snap, eating onely the kernels; and they made a great speil among the apples." There are many records of these birds visiting the British Isles since the periods previously alluded to. In June and July, 1791, a hundred pair were captured at Bath, and sold for about five shillings each. A flock was observed in a clump of fir trees at Penllergare, in Glamorganshire, in the winter of 1806. In the latter end of the year 1822 they were numerous in various parts of the country, especially in Warwickshire, Worcestershire, and Oxfordshire. In 1828 they appeared in Westmorland, and were again numerous in many parts of England in 1829, 1833, 1834, 1837, 1838, and 1839.

It is a remarkable fact in the history of this bird that it nestles at all times of the year. The nest is usually placed in the forked branches of fir or pine trees, and is loosely compacted of moss, grass, and small twigs, and lined with finer moss, dry leaves, and feathers. The eggs, which somewhat resemble those of the Greenfinch, are white, slightly tinged with blue or green, and spetted, chiefly at the larger end, with reddish or purplish brown. In April, 1839, the nest, eggs, and young, found in the neighbourhood of Farnham, in Surrey, were exhibited at a meeting of the Zoological Society by Mr. Charlesworth. This was the first instance in which the Crossbill had been known to

breed in this country. Other nests have been seen near Dartford, in Kent, in a pine tree, and near Saffron Walden, in an apple tree, but no eggs were laid in either of these cases.

This bird has a soft and pleasing note, which it sometimes utters while on the wing. As it feeds among the branches of the trees, it keeps up a constant twitter to its companions, accompanying every sound with a movement of the body. Besides its ordinary note, it occasionally when flying gives forth a sharp and ringing tone, which is known in Germany as the Crossbill's crow.

These birds have an undulated but smooth and rapid flight. They feed chiefly on the seeds of the pino and fir, but will also eat those of the apple, mountain ash, alder, and hawthorn. "In the antumn of 1821," says Maegillivray, "when walking from Aberdeen to Elgin, I had the pleasure of observing a flock of several hundreds of Crossbills busily engaged in shelling the seeds of the berries which hung in clusters on a clump of rowan-trees. They clung to the twigs in all sorts of positions, and went through the operation of feeding in a quiet and business-like manner, each attending to his own affairs, without interfering with his neighbours. It was indeed a pleasant sight to see how the little creatures fluttered among the twigs, all in continued action, like so many bees on a cluster of flowers in sunshine after rain."

These birds are considered excellent eating; in the market at Vieuna Mr. Gould saw immense numbers exposed for sale; they appeared to

be in great request.

The adult male varies in length from six inches and a quarter to seven and a half. The bill is dark greyish brown above, and dull yellowish beneath. The irides are hazel, the legs and toes purple brown, and the claws brownish black. The head and crown are pale dull red; and the neck of the same colour, mixed with grey. The upper part of the breast is pale dull red, mixed with yellow, the lower greyish white, darker at the sides. The back is dusky red, and reddish yellow towards the tail. The wings are brownish black, with some of the feathers tinged with dull red. The tail is deep brown. The plumage of this bird varies greatly at different ages and seasons of the year, at certain periods the yellow greatly predominates over the red. The prevailing tint of the female is dull brownish or yellowish grey.

This bird is sometimes called the European Crossbill, and the Shel or Sheld Apple; its specific title is derived from curvus—eurved, and

rostrum—a beak.

THE PARROT CROSSBILL,

(Loxia pityopsittacus.)

PLATE XIII. - FIGURE III.

THE Parrot Crossbill, sometimes called the Fir Grossbeak, very nearly resembles the species last described, both in form and plumage; indeed Bechstein says he considered it to be identical, until he kept the two birds in the same room, and had an opportunity of comparing them.

The male is from seven and a quarter to a little over seven and a half inches in length. The bill is thicker, and has the mandibles more curved than in the Common Crossbill.

This species inhabits Sweden, Norway, and most of the northern countries of Europe. It is not uncommon in Germany, but is rare in France and Holland. The first notice of its appearance in this country occurs in Pennant's "Zoology," published in the year 1776. He says, in his account of the Common Crossbill:-"We received a male and female of the large variety out of Shropshire: the bill was remarkably thick and short, more incurvated than that of the common bird, and the ends more blunt." Since that time several other specimens have been obtained; one was shot in Surrey, and another in Epping Forest, Essex, in the autumn of 1835. Others were taken at Riddlesworth Hall, in Norfolk, and at Saxham, in Suffolk, the latter in November, 1850. In March, 1838, several specimens were brought for sale to the London market, and eagerly purchased by those who were aware of their rarity. Another was shot at Harrew-on-the-Hill, Middlesex, on the 21st. of January, 1850, and a correspondent of Mr. Morris' states that he saw a small flock of these birds in a larch plantation at Dodington, in Kent, in September, 1851. Two specimens have been met with in Scotland, and one in Ireland.

These birds frequent forests of pine and fir. They are said to sit very still among the uppermost branches of the trees, and to feed on the seeds which they extract by means of their enrious curved bills. They are usually seen in parties of from twelve to twenty-four, and roost close together at night. When hopping from tree to tree, they utter a loud harsh call, not unlike that of the Common Crossbill, 'gep,

gep, gep.' The males have a deep and ringing, but very broken song, which they utter very constantly.

In Sweden the nest is said to be constructed early in April. The exterior consists of small twigs and moss, and the lining of the inner bark of the fir tree and a few feathers. It is usually placed among the topmost branches of very high trees, and contains three or four eggs of a pale grey or bluish white colour, spotted with bluish red and dusky at the larger end. The young are hatched in about a fortnight, and are very soon able to leave the nest.

The scientific name of this species is derived from loxos—curved or oblique, pittüs—a pine tree, and psittacus—a parrot.

AMERICAN WHITE-WINGED CROSSBILL,

(Loxia leucoptera.)

PLATE XIII .- FIGURE IV.

This species, which derives its name from leucos—white, and pteron—a wing, is most abundant in the northern parts of North America. It is sometimes met with in Europe, chiefly in Sweden and Germany; a considerable number appeared in Silesia and Thuringia in the autumn of 1826. The first specimen noticed in the British Isles was shot near Belfast in January, 1802. Others have been obtained in various parts of England, and a single one in Scotland.

Like the other species of Crossbills, these birds inhabit pine and fir They build their nests among the branches of these trees. placing them near the centre of the larger limbs, and forming them of grasses cemented together with earth; the interior lining consists of feathers. The eggs are five in number, white, spotted with yellow. The young are able to leave the nest in June. About September young and old collect in small flocks, and migrate southward, or retire to the sheltered woods in the interiors of the countries they inhabit. Prince Bonaparte says, "They keep in flocks of from twenty to fifty, when alarmed suddenly taking wing all at once, and after a little manœuvring in the air, generally alighting again nearly on the same pines whence they had set out, or adorning the naked branches of some distant, high, and insulated tree. When a deep snow has covered the ground, they appear to lose all sense of danger, and by spreading some favonrite food, may be knocked down with sticks, or even caught by hand while busily engaged in feeding."



GROSSBEAK AND CROSSBILLS.

- 1. Fine Grossbeak. 2. Crosstill. 3. Parrot Crosstill. 4. American White-winged Crossbill. 5. Two-barred Crossbill.



The song of this bird is described as mellow and agreeable; it differs, however, from that of the other Crossbills, as does also its call-note.

The adult male is about six inches in length, and has the bill black; the irides dark hazel; and the legs, toes, and claws dark brown. The head, neck, chin, throat, and breast are bright crimson. The wings and tail are black, the latter crossed by two bands of white. The young are very soberly attired, having all those parts which afterwards become crimson of a greenish grey colour. The female resembles the young birds, except that her breast is of a yellower tint.

THE TWO-BARRED CROSSBILL,

(Loxia tænioptera.)

PLATE XIII. - FIGURE V.

Another rare visitor to the British Isles, very similar in general appearance to the species last described, but having the head, back, and breast of a duller tint, and the wings and tail deep brown instead of black.

This bird inhabits Siberia and Northern Asia, occasionally migrating at uncertain periods into the more temperate regions of Russia, Sweden, Germany, Holland, and Belgium.

The adult male varies from six inches and a quarter to a little over seven in length. The bill is wider at the base than that of the American species. The wings are shorter and the tail longer than in the Common Crossbill.

The specific name of this bird is derived from tainia—a band, and pteron—a wing.

IN CONFINEMENT.

In Germany, where the Pine Grossbeaks are moderately abundant, they are captured by means of a brass ring fixed to the end of a pole, and provided with several horse-hair nooses. This is simply thrown over their heads while they are feeding. The great tameness and pleasant song of these birds render them desirable occupants of an

aviary, and they may sometimes be purchased from the German dealers on their periodical visits to London. They should be fed on hemp and rape seed, or bread soaked in water and mixed with a small quantity of grated carrot and wheaten flour. A friend of Mr. Audubon says, "I received a male of this species in splendid plumage, but so emaciated that he seemed little else than a mass of feathers. By cantiens feeding, however, he soon regained his flesh, and became so tame as to eat from my hand without the least appearance of fear. To reconcile him gradually to confinement, he was permitted to fly about my bedroom; and upon rising in the morning, the first thing I did was to give him a small quantity of seed. But three mornings in succession I happened to lie rather later than usual, and each morning I was aroused by the bird fluttering upon my shoulder, and calling for his usual allowance. The third morning I allowed him to flutter about me some time before showing any symptom of being awake; he no sooner observed that his object was effected than he retired to the window, and waited patiently until I arose. As the spring approached, he used to whistle occasionally in the merning, and his notes were exceedingly rich and full. About the time, however, when the species began to remove to the north, his former familiarity entirely disappeared."

The Common Crossbill may be also purchased in the London market. It will feed on hemp and rape seed, and soon becomes reconciled to confinement, and very tame. If kept in a cage it climbs over the wires with its beak and claws, in the manner of the Parrot. Mr. Yarrell mentions a pair kept by Mr. Morgan, which constantly amused themselves by twisting out the ends of the wires of their prison. The male was especially fond of trying his strength on a short flat-headed nail which held some strong network. This, after much perseverance, he succeeded in drawing out, not, however, before he had broken off the point of his bill in the experiment. "The exhalations of a room," says Bechstein, "have a bad effect on these birds, so that they are subject, when in confinement, to sore eyes, and swollen or ulcerated feet. The country folk of the mountains are simple enough to believe that these birds have the power of attracting their diseases to themselves, and are therefore glad to keep them."

The Parrot Crossbill sings very constantly in confinement, and becomes very tame. It is a great eater, and will thrive on the same diet as that recommended for the Grossbeak.

To keep these birds in good health they should be supplied with the seeds of the fir and pine whenever they can be obtained.

The American and Two-barred Crossbills are such rare birds that it will be unnecessary to speak of their treatment in confinement.

THE ROSE-COLOURED PASTOR, STARLING, DIPPER, AND THRUSHES.

THE two birds occupying the first places in our present group belong to the Graculinae, a family allied to the Crows on the one hand and the Thrushes on the other. They have compact bodies, shortish necks, rather slender and nearly straight beaks, and wings and tails of moderate length. The elegant Rose-coloured Paster is only a rare visitor to our shores, while its less brilliantly attired but handsome relative, the Starling, is a constant resident in all parts of the country, and one of the most familiar of British species. The first belongs to the genus Thremmaphilus, (a name derived from two Greek words, signifying the friend of cattle,) and the second to the genus Sturnus.

Next we have the Dipper, a member of the Myrmotherinæ, or Anteatcher family. The habits of this singular bird have been a fruitful source of contention among naturalists for many years past. Some assert that upon diving it is able to remain beneath the surface of the water without any perceptible muscular effort, and that it can walk at the bottom with the same case that it can upon dry land, while others deny its power of remaining submerged, except by the constant and rapid action of its wings. The question as to whether or not the bird feeds upon the spawn of fish has also been the cause of much discussion. In general form the Dipper resembles a Thrush with

shortened wings and tail; but in many of its habits it resembles the Moorhen.

The remaining three species in our group belong to the *Turdinæ*, or Thrush family. During the greater part of the year these birds feed upon snails, slugs, and larvæ, which they obtain in the fields and pastures, but the various hedge berries form their chief food in severe weather. In general form they are rather slender; their bills, wings, and tails are of moderate length. The Missel Thrush, the largest of the family, is a constant resident in this country, but the Fieldfare and the Redwing are only winter visitors from the northern parts of Europe.



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THE ROSE-COLOURED PASTOR,

(Thremmaphilus roseus.)

PLATE XIV .- FIGURE I.

This beautiful bird, which is sometimes called the Rose-coloured Starling, Ouzel, Thrush, or Cow-bird, is but a rare and accidental visitor to the British Isles; its true home is in Africa and the warmer parts of Asia. In India it appears to be particularly abundant. Colonel Sykes, in his "Catalogue of the Birds of the Dukkun," says, "These birds darkon the air by their numbers, at the period of the ripening of the bread grains in December. Forty or fifty have been killed at a shot. They prove a calamity to the husbandman, as they are as destructive as locusts, and not much less numerous." From Africa the Pastors migrate with tolerable regularity into Italy, Spain, and the south of France; a few individuals also find their way into Russia, Siberia, Lapland, and Sweden. Of the specimens that have been obtained in this country, one of the first was killed at Norwood, in Surrey. About thirty others are recorded to have been taken, several of them in Ireland, and two in Scotland.

In its habits this bird closely resembles the Common Starling; usually moving from place to place in large flocks, and flying with rapidity. Its food consists chiefly of insects, in search of which it frequently perches on the backs of sheep and cattle. At Aleppo it is held sacred because it feeds on the destructive locust. It is also partial to fruit, and is accordingly met with in gardens. A specimen shot in July, 1836, was in the act of feeding on cherries in a nursery garden near Swansea.

These birds are by no means shy, and will admit of a very close approach, especially when perched on the trees. When thus placed they have a most beautiful appearance, as they sit very close together, and look like masses of red flowers. Their common note is harsh and unmusical, but they have a rich and agreeable song.

They build in holos in trees, and in cavities in old walls or among

stones. In an account of this bird, as observed at Smyrna, which appeared in the "Zoologist," the Marquis Oratio Antinori says, "We found the nests in thousands, some quite open and uncovered, others concealed amongst the blocks of stones. They were often so close together as to touch one another, and were made with little care: the birds content themselves with a slight hollow in the ground, in which are placed some dead stalks of plants, and, in a few instances, a lining of grass. I observed many in which the eggs lay on the bare earth. The number of eggs may amount te four or five, some are fleshy white, others pearl-white with a tinge of blue; some have a few small dark specks at the thick end; the shell is very beautiful, strong, and shining." The same observer states that the female, while she sits on the nest, is fed by her partner upon grasshoppers, and that similar food is given to the young.

The male, which is nearly nine inches in length, has the beak of a yellowish rose-colour, and the head, crest, throat, wings, and tail, glossy black. The remainder of the body is of a delicate rose-colour. The female resembles the male, but her colour is much duller.

THE STARLING,

(Sternus vulgaris.)

PLATE XIV .-- FIGURE II.

THE Starling, with his beautiful metallic tints of blue, purple, and green, and the regularly disposed pale brown or white tips to the feathers over the greater part of his compact and shapely body, is really a handsome bird, although we are apt to pass him by almost unnoticed, for the simple, but by no means good reason, that he is "so common." There are indeed few parts of the British Isles in which he may not constantly be met with. Nearly all over the European Continent, too, he is equally abundant. In Asia he inhabits India, China, and Japan; and in Africa is found even as far south as the Cape of Good Hope.

During the greater part of the year Starlings live in large flocks, which scour the country in search of food, returning every night to

some fixed resting-place, such as a bed of reeds or clump of trees. The flocks of our resident birds are greatly swelled in the antumn by the addition of visitors from colder countries, their arrival being testified by the immense numbers sometimes found at the bases of our lighthouses, which have been "killed, maimed, or stupefied" by contact with the glass lanterns. The late Bishop Stanley, in his "Familiar History of British Birds," states that in 1836 no less than seventeen dozen were thus found near the lighthouse at Flamborough Head. An account of the appearance of an enormous flock of these birds is given in Mr. Stevenson's "Birds of Norfolk," which was communicated by Mr. J. G. Davey, of the Manor House, Horningtoft. "One night last week I watched a single flock, which appeared to extend over about five acres, as they were wheeling around, when another mass came from the south-west; I can form no estimate of the number; the former flock I considered large till these came, they also circled round, and the smaller lot joined this immense flock, and it seemed as if it was putting twenty people into a London crowd, it appeared no larger than before. They settled down in the wood in two parties, and occupied about thirty acres." In the fen districts of Liucolnshire, Cambridgeshire, and Huntingdonshire, where reeds are of some value for various purposes, these birds frequently do considerable mischief by settling on them in such immense numbers as to bear down and break them; so that large patches may be seen completely crushed and flattened almost to the surface of the water.

Starlings generally fly in a compact body, which moves with a steady but at the same time swift and graceful motion. Bishop Stanley thus graphically describes the flight of a large flock:—"At first they might be seen advancing high in the air like a dark cloud, which, in an instant, as if by magic, became almost invisible, the whole body, by some mysterious watchword or signal, changing their course, and presenting their wings to view edgeways, instead of exposing, as before, their full expanded spread. Again, in another moment, the cloud might be seen descending in a graceful sweep, so as almost to brush the earth as they glanced along. Then once more they were seen spiring in wide circles on high, till at length, with one simultaneous rush, down they glide, with a roaring noise of wing, till the vast mass buried itself unseen but not unheard, amidst a bed of reeds; for no sooner were they perched, than every throat seemed to open itself, forming one incessant confusion of tongues."

This bird builds in holes in the walls of towers or other buildings, church-steeples, or ruins; frequently in cliffs and lofty rocks overhanging the sea, and sometimes in hollow trees. In the first volume

of the "Naturalist," J. Mc Intosh, Esq., describing a famous chestnut tree in the grounds of Canford House, Dorsetshire, mentions that at its base was a colony of rabbits, in the trunk a nest of cats, and above both a nest of Starlings. The nest is large, and composed of straws, roots, dry grass, and stems of plants, with a rude lining of feathers and hair. The eggs are four or five in number, of a uniform pale blue colour; they are hatched in about sixteen days. Both parents feed the young, and exhibit a particularly strong attachment to them. A pleasing anecdote in illustration of this is given in Mr. Morris's "Anecdotes of Natural History," extracted from the "Gloucestershire Chronicle:"-"A gentleman who had discovered a Starling's nest, in which were several young birds, being desirous to domesticate them, had the nest removed from its situation, near Marle Hill, at a late hour in the evening, when the young birds were brought down to his residence in the heart of the town, and placed in a cage which was suspended in his garden. About three o'clock in the afternoon of the following day, the female Starling was observed at the bars of the cage, actively employed in feeding its young, which, by an instinct hardly inferior to reason, it had thus succeeded in discovering." Another display of parental affection occurred some years ago during a fire at Dover. A Starling was observed in her nest on a tree not far from the burning building. As the flames approached she manifested her anxiety by flitting uneasily backwards and forwards. At last, when the danger became imminent, she was seen to take one of her young ones and remove it to a safe distance. This she repeated five times, and succeeded in saving all her brood.

The food of these birds consists of worms, caterpillars, grasshoppers, and all kinds of insects, in search of which they may be seen in company with Rooks, Jackdaws, and Thrushes. With other species they rarely quarrel, unless they should both happen to come upon the same dainty morsel together, and even then the feud rarely becomes serious. They often perch on the backs of sheep, to feed on the ticks and other insects that so frequently infest their woolly covering. On horses and cows, too, they sometimes alight for a similar purpose. Towards winter, as insects become scarce, the Starlings frequent the corn-yards and stubble-fields in search of grain. During very severe weather they may be seen upon the sea-shore, turning over the stones to obtain marine worms and small mollusca.

The Starling has a soft and rather pleasing note, which it frequently atters in bright and sunny weather, even in winter. When a number of these birds are singing, if it may be so called, together, the result is melodious and decidedly agreeable. Their common call-note

is compared by Meyer to the words "starling, star, or stoar." The flesh of the Starling is said to be very good eating, somewhat similar to that of the Thrush, but rather tougher, and a trifle bitter.

THE DIPPER,

(Cinclus aquaticus.)

PLATE XIV .-- FIGURE III.

This species, which is particularly interesting on account of its peculiar habits, is a native of Russia, Siberia, Norway, Sweden, Switzerland, Germany, and Spain. It is also common in Central Asia, Palestine, and North-western Africa. In Great Britain it is to be met with in the mountainous districts, frequenting the streams which there take their rise, and following the numerous cascades and waterfalls that make them so beautiful and attractive until they reach the lowlands. Nowhere is this bird more abundant than upon the banks of the picturesque Derbyshire rivers, the Dove and Derwent.

In general appearance the Dipper is not unlike the Wren, which it also somewhat resembles in its motions and attitudes. The adult male is about seven inches and three quarters in length, and has the bill bluish black, and the irides pale brown. His plumage is simply but strikingly coloured. The head and nape are dark brown, and the rest of the upper parts slate grey. The chin and throat are pure white, and the breast and under part of the body brownish red. The female is a little smaller, and of a slightly paler colour than the male.

This singular bird passes a large portion of its time in the water; it plunges boldly into the bed of the foaming, rearing waterfall, and remains below the surface in a most surprising manner, either propelling itself by means of its wings, or grasping the stones with its claws, and thus moving about at the bottom. The latter fact, however, we must inform our readers is disputed by some eminent naturalists, although very many excellent observers have borne witness in its favour. At any rate the bird does not usually traverse much space below the surface, but appears in a short time somewhere near the same spot at which it entered the water, very frequently returning again

and again to some particular stone or projecting piece of rock. "In one or two instances," says Montagu, "where we have been able to perceive it under water, it appeared to tumble about in a very extraordinary manner, with its head downwards, as if picking up something; and at the same time great exertion was used, both by wings and legs." This bird is often accused of destroying the eggs and fry of the salmon and trout, and is therefore shot or snared by gamekeepers and others on every opportunity. Much discussion has taken place on this point in the columns of the "Field," "Zoologist," "Times," etc., but we think the evidence tends most strongly to prove the charge nnfounded, and to show that the Dipper is really protecting the spawn, by destroying the various water-beetles and larvæ that are known to prey on it. In support of this view Mr. Buckland writes, "It may be observed that I do not mention the Dipper as destructive to spawnthis advisedly, as of late I have carefully examined the gizzards of several of these beautiful little birds, and have found only the remains of water-insects in them; write the Dipper the friend and not the enemy of fish spawn."

The nest of this bird is usually placed close to the stream in holes in the rocks or beneath some overhanging stone. It is large, measuring ten or twelve inches in diameter, and seven or eight in depth, and consists of twigs, grass, and moss, with a thick lining of leaves. Being doined over and firmly compacted, it prevents the entrance of any water, even when placed in the spray of a cascade. The eggs, from four to six in number, are glossy white, and of a regular oval form. Three broods are frequently reared in a season.

THE MISSEL THRUSH,

(Turdus viscivorus.)

PLATE XIV .- FIGURE IV.

This bird, which derives both its common and scientific names from its supposed fondness for the berries of the mistletoe, is the largest European member of its genus, measuring upwards of eleven inches in length, and having a spread of wing exceeding eighteen inches. It is a resident in this country throughout the year, being most plentiful

in the southern and midland counties. In Wales it is abundant, and is known by the name of "Penn y llwyn," or "Master of the Coppice." In Ireland it is also common, but in Scotland is rarely met with except in the southern parts. On the European continent it is found in Scandinavia, Russia, Germany, France, and Italy.

These Thrushes are generally to be met with in woodland districts, or along the borders of fields; they fly in loose flocks of about twenty in number, uttering a kind of low scream at intervals as they proceed. When a recently ploughed field or other desirable feeding place is found, they alight rather suddenly, and disperse over its surface in search for worms, larvæ, or seeds. While thus engaged they continue extremely alert and wary, "the moment one is alarmed it emits a low churr, which is repeated by the rest, when they either fly to the trees in the neighbourhood, or flit to a distant field." Their flight is rapid and undulated, but rather clumsy and uneven.

Towards the end of March the flocks break up, and about the middle of the following month partners are selected, and building operations commenced. The nest is usually placed in the fork of the branch of a tree in a wood, garden, or orchard, very frequently in an apple tree in the latter. It is a loose structure of about four inches and a half in diameter, and is composed of twigs, dry grass, moss, leaves, and lichens, coated internally with a layer of mud, and lined with finer grass, roots, and moss. The same tree is often returned to year after year, and the same nest has been known to be used twice in a season. The eggs are from three to five in number, of a greenish or reddish white colour, spotted irregularly with reddish brown or purple red. Two broods are produced in the season. The young are fed on insects, worms, or snails. Mr. Weir watched a pair of old birds bring food of this kind to their offspring sixty-six times during the course of a day.

The song of the Missel Thrush, which somewhat resembles that of the Blackbird, but is rather harsher and not so rich, may be heard very early in the year, sometimes even in February. Often, spite of wind, rain, and storm, this bird will pour forth his strain from the top of some lofty oak, beech, or fir tree.

The title of "Master of the Coppice," which we have mentioned as applied to this bird in Wales, is well deserved, for he is of a very bold and quarrelsome disposition, especially during the breeding season, driving all smaller birds from his haunts, and even ferociously attacking those of his own size. He has a bad reputation, too, for destroying young birds and eggs of other species. On one occasion Mr. Weir saw a Missel Thrush flying off with a young Hedge Sparrow in its

bill, closely pursued by the bereaved parent. The same observer gives another instance of his predatory habits. "One forenoon," he says, "when going to my garden, I looked into the nest of a Thrush, and saw that it contained four young ones nearly fledged. Having returned in the course of a few hours I again peeped into it, when, to my astonishment, I beheld one of them severely cut in the breast, and almost at the point of death. I could not imagine what had been the cause of this sudden catastrophe. The gardener, however, told me that hearing the male and female Thrushes setting up the most doleful screams, he immediately ran to the spot in the expectation of seeing a cat or a weasel; but in the place of them he beheld a Missel Thrush in the very act of killing one of their brood."

This bird feeds on berries of various kinds, especially those of the mountain-ash, the helly, ivy, and yew. It also eats caterpillars, beetles,

slugs, snails, insects, and seeds.

The adult male weighs nearly five onnces, and is about eleven inches and a half in length. The beak is dark brown; the irides hazel. The top of the head and back are clove brown. The wings and tail are umber brown. All the under surface of the body is white, tinged with yellow and spotted with black. The female is similar both in size and colour.

THE FIELDFARE,

(Turdus pilaris.)

PLATE XIV. - FIGURE V.

Or the various birds that visit the British Isles during the winter, the Fieldfare arrives the latest, not making its appearance until the end of October or the middle of November. About the end of April it again departs for the extensive birch forests of the northern parts of Europe, where it makes its home and rears its young. In Prussia and Anstria it dwells throughout the year, but in France, Switzerland, and the other southerly parts of the Continent it is, as with us, only a winter visitor.

The Chesnnt-backed Thrush, Feldfar, Feltyfare, Felt, Blue-back, Blue-tail, and Blue Felt, are all names by which this species is known.

It is generally to be met with in large flocks, which during mild weather spread themselves over the low pasture lands in search of worms, slugs, or the larve of insects, but in winter, when their hunting grounds are covered with snow, resort to the uplands to obtain the haws and other berries from the hedges. Should the weather, however, become unusually severe, the Fieldfares leave us to go further south, and visit us again on their migration homewards.

The flight of this species is rather slow, but easy and slightly undulated; the wings are alternately flapped quickly about a dozen times, and then extended motionless for a second or two. While proceeding in this manner, a low cry is uttered at intervals, until a desirable feeding ground being sighted, the whole flock wheel around several times, and then alight. "After settling," says Macgillivray, "each is seen to stand still with its wings close, but a little drooping, its tail slightly declined, and its head elevated. It then hops rapidly a few steps forward, picks up a seed, an insect, or other article of food, and again proceeds."

The Fieldfare has a soft and not unmelodious song, which is sometimes heard as early as the end of February. A number of these birds will frequently, as they sit upon the upper branches of the trees, unite their voices in pleasing chorus. Their alarm note resembles the syllables "chack, chack, chack, chack."

In a few instances this species has been known to breed in Britain. Pennant mentions two cases that came to his knowledge, and a nest has been found in Kent, and others in Yorkshire and Scotland. In Norway a number of nests are usually found close together, they are placed either against the trunks or among the branches of the spruce firs, at heights varying from four to thirty or forty feet, and consist of sticks, grass, and weeds, gathered wet, and cemented together with moist clay, and thickly lined with grass. The eggs are from three to six in number, of a pale bluish green, spotted with dark reddish brown. The young are able to fly about the first week in August.

We may mention that the Fieldfaro is supposed to be the species of Thrush so highly esteemed by the Romans as an article of food, and which they fattened with a paste composed of figs and flour. Its flesh is said to be tender and sapid, although slightly bitter. Great numbers are sometimes shot or snared in this country for the table, and may be purchased in the markets of London, Edinburgh, and other cities.

The male weighs about four ounces, and is from ten and a half to ten and three quarter inches in length. The head and hind neck are ash grey; the back dull chesnut brown; the wings and tail mostly black. The chin and throat are pale reddish yellow, streaked with black. The upper part of the breast is light yellowish red above, and almost white below, spotted with brownish black. The female closely resembles the male, but is a little smaller.

THE REDWING,

(Turdus iliacus.)

PLATE XIV .- FIGURE VI.

Inke the Fieldfare, the Redwing is a winter visitor to our shores from the northern and north-eastern parts of Europe. It arrives, however, somewhat earlier, being frequently seen in Scotland by the middle of October. The end of April or the beginning of May is usually the time of its departure, but in very backward seasons it has been known to remain till June. The British Isles are by no means the southern limit of the winter wanderings of the Redwing, for it finds its way into France, Spain, and Italy, and has been seen by Mr. Strickland in Smyrna.

In different parts of Britain this species is known by the names of the Red-sided Thrush, the Wiud Thrush, and the Swinepipe. In form and colour it bears a strong resemblance to the Common Thrush, but it is a little smaller, and has a white streak over the eye, which in that bird is wanting. Its whole length is about eight inches and three quarters. The top of the head, hind neck, back, and tail, are dark olive brown. The sides are bright reddish orange. The chin and throat are dull white; the breast is greyish white spotted with brown.

In this country the Redwings, like the Fieldfares, are to be met with in large flocks, which disperse during mild weather over the pasture-lands and moist meadows in search for worms and grubs. When the ground is covered with snow or hardened by frost, they betake themselves to the hedges and feed on the berries of the holly and the hawthorn. Should the cold weather be of long continuance, these birds are among the first to suffer. In the severe winters of 1799, 1814, and 1822, many perished, and hundreds were

found in a starving condition. On such occasions they settle about springs and brooks, and are easily destroyed. The flocks of Redwings often mingle with Fieldfares and Missel Thrushes. They fly in a rapid and slightly undulated manner, usually at a considerable height.

The ordinary note of this bird is a rather harsh scream. Mr. Slaney says it resembles "a sort of inward deep-drawn sigh, like an attempt at ventriloquism." In fine weather, it may be heard, when perched on the topmost branches of a tree, singing a subdued and murmuring kind of song that is rather pleasing. With us, however, it does not appear to exert its full powers, for Linnaus in his "Tour in Lapland," says "the amorous warblings of the Redwing from the top of the spruce fir were delightful. Its high and varied notes rival those of the Nightingale herself." Other naturalists describe its song as loud, sweet, clear, musical, and at the same time delightfully wild.

The nest is said to be placed in a birch, alder, or other tree, or in a thorn or other bush. It is very similar to that of the Fieldfare, being composed of moss, roots, and dry grass, cemented together with clay, and lined with finer grass. The eggs, which are laid in June, are about six in number, of a pale bluish green, spotted with reddish brown. In a few instances the Redwing has been known to breed in Britain; a nest was taken near Barnet, in Middlesex, and another near Godalming, in Surrey. In 1836, a nest containing four eggs, was found at Kildare, in Cleveland.

IN CONFINEMENT.

Our readers are not likely to obtain a live specimen of the Rose-coloured Pastor, but it may interest them to know that it has been kept alive in confinement for several years. Bechstein tells us that in 1774 M. Von Wachter, a German clergyman, having obtained one that had been slightly wounded, placed it in a spacious cage, and fed it on barley-meal moistened with milk. It soon recovered from its injuries, and rewarded its preserver by exhibiting great tameness and affection, and singing very sweetly. "A connoisseur who had not discovered the bird, but heard its voice, thought he was listening to a concert of two Starlings, two Goldfinches, and perhaps a Siskin; and when he saw that it was a single bird, he could not conceive how all this music proceeded from the same throat." In the summer of 1837 or

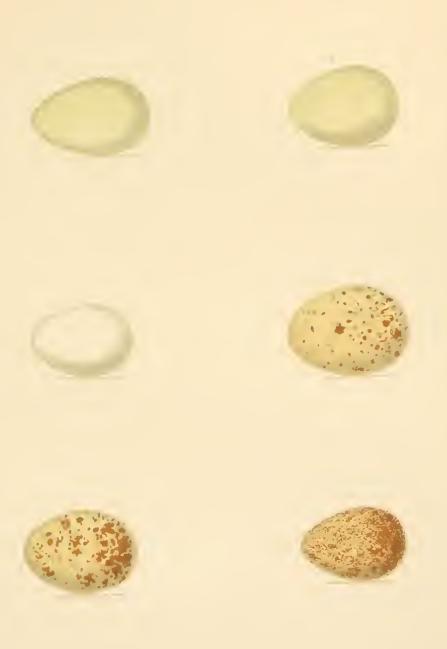
1838, a London dealer had three living specimens of this species for sale.

The Starling is a well known and favourite cage bird. Being of a restless disposition, it requires a cage of at least two feet in length and a foot and a half in breadth, or it will injure its plumage against the sides. It is no dainty feeder, but will thrive on the universal paste, insects, bread, or indeed anything which is not sour. Being extremely fond of bathing, it requires a constant supply of fresh water. It may readily be taught to pronounce words or to whistle tunes. Mr. Weir gives an account of an individual kept by a carver and gilder of Edinburgh, that articulated most distinctly the following sentences when he entered the shop, "Come in, Sir, and take a seat. I see by your face that you are fond of the lasses. George, send for a coach and six for pretty Charlie. Be clever, Georgey! I want it immediately." If an adult wild bird be obtained, it may soon be reconciled to the food of the aviary by a diet of mealworms, and will become as tame as if reared from the nest.

The habits of the Dipper render it a rather unsuitable bird to keep in confinement, but it will live for some years in an aviary, if fed on the universal paste, to which it must at first be gradually inured by a judicious use of mealworms and insects.

The Missel Thrush will live in confinement for ten or twelve years; but its song is so loud as to be disagreeable if it is kept in a sitting-room. It will thrive on the universal paste, or wheaten bran moistened with water. If placed in a small cage, it will generally manage to reduce its tail to a mere stump by rubbing against the wires. It is fond of bathing, and must be kept cool.

The Fieldfare and Redwing may be treated as the preceding species.



ROSE-COLOUKED FAST R. ETC.

1. R e-coloured Pastor. 2. Starling. 3. Pipper. 4. Missel Thrush 5. Fieldfare. 6. Redwing.



THRUSHES, BLACKBIRD, OUZEL, ORIOLE, AND WAXWING.

A T the end of the chapter accompanying our last group we gave our readers a short account of the general form, proportions, and habits of the Turdinæ, or Thrushes. Of the birds placed by ornithologists in this interesting family, three were mentioned and fully described in the pages that followed, and the remaining British species are included in our present group. First we have an important contributor to the natural music of the woods and glades, the favourite Song Thrush. Of this sweet minstrel Graham writes—

"The Thrush's song
Is varied as his plumes; and as his plumes
Blend beauteous, each with each, so run his notes
Smoothly, with many a happy rise and fall.
How prettily, upon his parded breast,
The vividly contrasting tints unite
To please the admiring eye; so, loud and soft,
And high and low, all in his notes combine,
In alternation sweet, to charm the ear."

The Song Thrush is about two inches shorter than the Missel Thrush, and has a longer bill in proportion to its size, but in general form it closely resembles that bird. The Rock Thrush, the smallest of its family, has been met with in this country in a few instances only, although it is moderately abundant in most of the mountainous parts

of the European continent. Next follows the Blackbird, famous alike for his beautiful glossy jet plumage, handsome form, and rich flute-like song. He is a permanent resident in nearly all parts of Britain, and cannot fail to be loved, and looked upon as a familiar friend, by all those dwellers or ramblers in the country who

"Go abroad rejoicing in the joy
Of beautiful and well-created things."

The Ring Ouzel could scarcely be distinguished from the Blackbird at a slight distance, were it not for a sharply defined patch of pure white on the upper part of his breast. He is no doubt known to many of our readers who dwell in Scotland, or the northern counties of England, but to those whose homes are in the southern parts, he is probably a stranger.

The Golden Oriole, though a member of the same family as the previous species, belongs to a separate genus, called *Oriolus*. In Germany and some other parts of Europe this brilliantly-plumaged bird is a common summer resident, but its visits to our island are "few and far between." The Orioles are distinguished from the Thrushes proper by their longer and stouter beaks, shorter necks and legs, and rather longer wings and tails.

The Waxwing is the only British representative of the Ampelinæ or Chatterers, a family characterized by short necks, full and compact bodies, tails of moderate length, and longish wings. Our British species, which is, however, but a rare and accidental visitor from northern regions, belongs to the genus Bombycilla.



HRT S DIT.

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THE THRUSH,

(Turdus musicus.)

PLATE XV. -- FIGURE I.

The Common Thrush, often called the Throstle or the Mavis, is to be met with in all parts of the British Isles throughout the year. Its favourite resorts are woods, plantations, shrubberies, and the banks of streams well covered with bushes and thick vegetation. Not unfrequently it may be seen in gardens and orchards, but it avoids the vicinity of houses, except during the winter, when it often exhibits great boldness in approaching the doors and windows in search of food.

In form and proportions this bird resembles the Missel Thrush, but it is considerably smaller, rarely measuring more than nine inches and a quarter in total length. Its plumage, though by no means striking, is not destitute of beauty. The upper part of the head, neck, back, wings, and tail, are yellowish brown. The throat is white; the sides of the neck and breast are pale reddish yellow, each feather terminating with a triangular dark brown spot. The irides are hazel, the legs and feet brown.

The food of the Thrush consists of insects, slugs, and worms. It is particularly partial to the various species of garden snails, the shells of which it ingeniously breaks against a stone, and then shakes or picks out the slimy inhabitants. Heaps of these broken shells may sometimes be found scattered around a large stone in a retired corner of a garden, or by the edge of a thicket. In the Hebrides, where this bird frequents the shores in winter, Maegillivray says it treats the whelk and other mollusca in the same manner. Besides the food we have mentioned, the Thrush sometimes partakes of fruit and berries. In France, Italy, and Spain, it feeds largely during the autumn on the ripe grapes. At that time its flesh is considered particularly delicate and delicious, and it is consequently shot or snared in large numbers for the tables of the wealthy.

About the latter end of March this bird constructs its nest, which is formed externally of moss, fine roots, grass, or twigs, and has its inner surface coated smoothly with clay or cow-dung and decayed wood. It measures about seven inches in diameter, and from two and a half to four in depth. Frequently it is placed in the centre of a thick hedge or bush, or among the lower branches of a fir or holly tree, but very curious positions are sometimes selected; a specimen was found on the shaft of a thrashing machine, and another on the top of a rail. Open sheds or tool-houses in gardens are not uncommonly built in. Bishop Stanley relates an instance of this kind:-"A short time ago, in Scotland, some carpenters working in a shed adjacent to a house, observed one of these birds flying in and ont, which induced them to direct their attention to the cause, when, to their surprise, they found a nest commenced among the teeth of a harrow, which was placed upon the joists of the shed just over their heads. The carpenters had arrived soon after six o'clock; and at seven, when they found the nest, it was in a state of great forwardness, and had evidently been the morning's work of a pair of these indefatigable birds. Their activity throughout the day was incessant, and when the workmen left off in the evening, and came again in the morning, they found the female seated on her half finished mansion; when she flew off for a short time, it was seen that she had already laid an egg, though the bottom of the nest was the only part plastered and completed. When all was finished the male bird took his share in the hatching. The young were hatched in thirteen days." The eggs, four or five in number, are of a beautiful pale blue colour, with a few distinct black spots at the larger end. Two broods are reared in a scason. "The feeling of tenderness," says Macgillivray, "which these birds manifest toward the young of other birds, has been displayed in several very striking instances. I have now in my possession a male Thrush which, when it was six weeks old, brought np a brood of half-fledged Larks. What is still more remarkable, he with the most tender care and anxiety fed a young Cuckoo, which had been taken out of a Titlark's nest."

The Thrush is justly celebrated for the sweetness and beauty of its song. Very few of our woodland choristers possess the power of pouring forth so charming a variety of clear, rich, and mellow notes. He may be heard as soon as the first golden beams of morning shoot up in the eastern sky, and his voice, less vigorously exerted during he day, rings again through the woods, clear and loud, but full of tender and delicate cadences, as the sun sinks behind the western hills, and the hush of approaching night steals gently and gradually over the

face of nature. As the Thrush is one of the sweetest, so he is also one of the earliest of singers. Gilbert White gives from the 6th, to the 13th, of January as the period of the commencement of his joyons strains, and Burns records his pleasure in hearing one of these birds sing thus early in the year, in a sounce beginning—

"Sing on, sweet Thrush, upon the leafless bough; Sing on, sweet bird, I listen to thy strain: See aged winter, 'mid his surly reign, At thy blithe earol clears his furrowed brow."

Few birds sing with greater animation than the Thrush, as the following ancedote, related by Bishop Stanley, will testify:—"In the garden of a gentleman in Sussex, a Thrush had for some time perched itself on a particular spray, and made itself a great favourite from its powerful and constant singing, when one day it was observed, by the gardener, to drop suddenly from the bough in the midst of its song. He immediately ran to pick it up, but found it quite dead; and upon examination, discovered that it had actually broken a blood-vessel by its exertion, and thus perished."

THE ROCK THRUSH,

(Turdus saxatilis.)

PLATE XV .- FIGURE II.

This species, according to M. Temminck, inhabits the highest rocky mountains, and is found in the Alps, the Pyrences, and the Appenines. It is also met with occasionally along the coasts of the Mediterranean, and in France, Germany, and the islands of the Grecian Archipelago.

Mr. Yarrell states that a specimen was shot by Mr. Joseph Twigg, at Therfield, near Royston, in the county of Hereford, on the 19th, of May, 1843; and it is recorded that another individual was killed in this country by a gamekeeper, but neither date nor locality is given.

The male, which is about seven and a half inches in total length, has the bill black, the legs and feet reddish brown, and the irides dark brown. The head and neck are bluish grey. The back is of

the same colour on the upper part, and nearly white, with a few bluish feathers, on the lower. The chin, throat, and breast, are light chesnut brown. The wings are dark brown, marked with white. The tail is chesnut brown, with the two central feathers darker than the others. The female is of a duller colour than the male.

The Rock Thrush is said to be a very shy bird, rarely permitting any one to come within gunshot. It builds a nest of moss in the crevices of rocks, or in heaps of stones, and lays four eggs of a greenish blue colour. Its food consists of beetles and other insects, in search of which it has been seen turning over the smaller stones on the bare sides of the mountains. When the ground is covered with snow, and insects cannot be procured, it eats berries. Bechstein says it is an exceedingly good songster.

THE BLACKBIRD,

(Turdus merula.)

PLATE XV .- FIGURE III.

The Blackbird is so common throughout the British Isles, that all our readers must be familiar with his glossy black plumes, and bright yellow bill. All over the European continent, too, he is more or less abundant, from Norway and Sweden in the north, to the coasts of the Mediterranean in the south. He is also to be met with in many parts of Asia and Africa.

This bird frequents thickets, hedges, woods, and plantations, but is rarely seen in wild and uncultivated districts. In winter it approaches houses and towns, concealing itself among thick vegetation in gardens and shrubberies. Unlike most of the members of the Thrush family, it is seldom met with in large flocks, more than a pair being rarely seen in company, even in winter. In its habits it is shy and vigilant; on the least alarm it takes wing, uttering at the same time a peculiar loud chuckling cry; it rarely flies, however, to any great distance, but hides in some neighbouring hedge or bush till the real or fancied danger is past. The Blackbird is of a very lively and restless disposition. "It is amusing," says Macgillivray, "to observe one that has just alighted on a twig, and see how gracefully it bends forward, throws up its tail, jerking it at intervals, depresses and at intervals

flaps its wings, and then perhaps flits to another branch, where it performs the same motions, or alights on the wall, hops along, suddenly stops, jerks its tail, flaps its wings, and then commences singing." When this bird is passing over an open space where it does not intend to alight, its flight is steady and without undulations, but it flits in a wavering and uncertain manner over bushes and thickets.

The food of the Blackbird is very various. In the spring, summer, and autumn it eats worms, snails, slugs, larvæ, beetles, and other insects, as well as fruit of various kinds; but during the winter it feeds on wheat, oats, and many sorts of seeds and berries. As is the case with most of our fruit-eating birds, it probably does a much greater amount of good than harm in our gardens and orchards. In support of this opinion a writer in "Chambers's Edinburgh Journal," relates that a grass-plot attached to a country house was observed to be visited by a number of Blackbirds, and to be completely ploughed up by their beaks. The owner of the property being unwilling to shoot them, caused the plot to be dug up in several places to discover the cause of their proceedings, and found it to be overrun with the larve of chafers. The birds were left in undisturbed possession, and although the walls were covered with ripe fruit, they left it untouched, and devoted their attention to the grubs, which they entirely destroyed; and the grass-plot soon resumed its original appearance. Even allowing that the Blackbird frequently helps himself rather liberally to the produce of the garden, surely he more than repays us for our loss by his delightful song, without taking anything else into consideration. Thus thought Sir Alan Chambre, a judge in the Court of Common Pleas, as is shown by the language he is recorded to have addressed to his gardener, on discovering he had shot one of these birds.—"You have destroyed, sir," said he, "that which you cannot restore to life! You have removed that creature from my presence for ever which I greatly cared for. That Blackbird, for many spring mornings together, delighted me and comforted me with his goodly song. Did the bird ever harm you? deprive you of your rest, or rob you of your possessions? I think not. Sir, I shall insist that no servant in my employ shall, under any pretension whatever, destroy a single bird upon my premises. Let the birds enjoy what fruit I have. It is only my paying them back in my fruit for the enjoyment they impart to me with their charming melody; and this justifies me in addressing you to the purport I have

The Merle, as this bird is often called, commences his song very early in the year, in allusion to which the Scottish poet Graham bids us—

"List to the Merle's dulcet pipe! melodious bird! Who, hid behind the milk-white hawthorn's spray, Whose early flowers anticipate the leaf, Welcomes tho time of buds, the infant year."

Although not remarkable for compass or variety, his notes are particularly rich and powerful. They ring through the woods in the early mornings, at intervals during the day, and again in the evening twilight, when all other songsters, except the Thrush and the Nightingale, are silent. Even during heavy rain and thunder-storms, he has been heard pouring forth his song with unabated vigour. He is a great imitator of the sounds made by other birds, and has been known to closely copy part of the song of the Nightingale, and also of the Thrush. Several instances are on record of his crowing so exactly like a cock as to deceive the neighbouring farm-yard fowls, and to be answered by them; and in another case he was heard to imitate the cackle of a hen.

A Blackbird's nest, containing two eggs, was found at Brompton, in Yorkshire, as early as the 8th. of January, but building does not usually commence with this bird, until about the end of February. The nest is commonly placed in the middle of a thick bush at a height of three or four feet, occasionally it is fixed in a tree, or among the ivy against a wall. The materials used in the construction of the exterior are roots, twigs, rushes, or coarse grass; these are plastered over internally with clay or mud, and then covered with a lining of finer grass. The eggs, from four to six in number, vary greatly both in size and colour, most commonly they are about an inch and a twelfth in length, and of a pale bluish green, speckled with light reddish brown.

An interesting story, exhibiting the brave manner in which the Blackbird will defend its offspring, is related in Mr. Morris's "Anecdotes of Natural History."—A cat was endeavouring to get at a nest that was placed near a paled fence. The hen flew to meet her, and placed herself almost within reach of the intending plunderer, uttering loud screams of terror and despair. As soon as the cock bird perceived the danger, he likewise screamed wildly, and settled on the fence in front of the cat, who was unable to make a spring at him in consequence of the narrowness of her footing. At length, the danger increasing, he made a sudden dart at puss, settled on her back, and pecked her head so violently that she fell to the ground, and was compelled to beat a retreat

THE RING OUZEL,

(Turdus torquatus.)

PLATE XV .-- FIGURE IV.

THE Latin word torquatus, meaning one that wears a collar or chain, is applied to this species on account of the broad, half-moon-shaped patch of white at the lower part of the neek, that stands out so conspicuously from the nearly black plumage of the remainder of its body. In general form it resembles the Blackbird, but is rather stouter, and has the wings longer, and the tail shorter.

This bird, sometimes called the Rock, Tor, or Mountain Ouzel, the White-breasted or Moor Blackbird, and the Ringed Thrush, visits the British Isles about April, and departs in October. It spends the winter in the warmer parts of Europe—France, Spain, Portugal, Italy, Switzerland, and Germany; but its northern range extends, during the summer, as far as Norway and Sweden. In this country it resorts chiefly to the northern and western rocky and mountainous districts, breeding in some parts of Wales, Ireland, and Scotland, as also in the counties of Cumberland, Northumberland, Yorkshire, Westmoreland, Durham, Derbyshire, and Devonshire. In the other parts of England it is frequently seen, when migrating during the spring and autumn, but rarely remains to breed. About October flocks of twenty or thirty are sometimes met with along the southern coasts preparing for departure.

The Ring Ouzel is very shy and wary, except during the breeding season, when, if any person approaches its nest, it is bold and clamorous. Like the other members of the Thrush family, it is of a restless and active disposition, rarely remaining long in one position, and frequently twitching its tail and jerking its wings. Its flight is strong, rapid, and but slightly undulated; when disturbed it usually flies off in a direct manner to a considerable distance. It feeds on worms, snails, and insects, but before migrating in the autumn, often leaves the wild and desolate mountain regions for the lower cultivated districts, and attacks the cherries, gooseberries, and other fruit. "The

Moor Blackbird," says the Rev. N. Paterson, of Galashiels, in Sclkirk-shire, "has of late years become a most troublesome spoiler of the garden. The daring thief comes before the windows and carries off a plum nearly as large as itself, showing by its chatter more of anger than fear when it is disturbed in the work of depredation. The finest wall-fruits are its prey." In France, Buffon says it feeds largely on grapes.

The nest resembles that of the Blackbird, being composed of coarse grass, plastered internally with clay, and lined with finer grass. It is usually placed amid the heather, under the shelter of a furze or other bush, or in some well concealed hollow in a rock. It has sometimes been found in a tree at a height of five or six feet from the ground. The eggs are from four to six in number, of a pale greenish blue colour, spotted, most thickly at the larger end, with reddish brown or pale purple. The young are fully fledged by about the middle of June.

The song of the Ring Onzel is without much variety, but loud and mellow. Its cry of alarm "consists of a repetition of strong clear notes, like those of the Blackbird, but louder." Meyer likens its ordinary note to the syllable 'tuk.'

THE GOLDEN ORIOLE,

(Oriolus galbula.)

LATE XV .-- FIGURE V.

In size and shape this species resembles the Blackbird. The plumage of the male is exceedingly beautiful, being of a brilliant golden yellow, except the wings and tail, which are black, edged and tipped with yellow. The female is more soberly attired, the tip of the tail only is yellow, while the general colour of the upper parts of the body is greenish yellow, and of the lower yellowish white, streaked with dark brown.

The Golden Oriole is plentiful in Asia and Africa, and from thence visits Italy, France, Spain, Germany, and Holland about April, returning in September. It is not a regular visitor to the British Isles, but a few accidental stragglers have been obtained in England, chiefly in the southern counties, and a few in Ireland.

These birds are said to frequent forests of birch or oak, always keeping among the thickest foliage, so as to conceal themselves from view. They are very restless, constantly hopping or flying from one branch to another in search for caterpillars, beetles, and other insects. When the fruit is ripe they visit the orchards and gardens, and are especially troublesome in Germany during the cherry season. Their flight is described as "heavy, noisy, rapid, and very undulating." On the ground they move by a series of awkward leaps. Their song is said to be loud, full, and clear, and to be very constantly uttered from the upper branches of a tree. Their call-note is supposed to resemble and to be the origin of their name—Oriole in English, Turiol in Spanish, and Loriot in French.

The nest of this beautiful bird, which has been found in a few instances in England, is usually attached to a forked and slender branch. It is cup-shaped, and composed of stalks of grass and roots interwoven with wool. It varies greatly in depth; some specimens are so shallow as to almost resemble a saucer, while others are so deep as to present a purse-like appearance. The eggs, four or five in number, are of a regular oval form, of a purplish white colour, and marked with a few dark grey or reddish spots. They are laid about June, and the young are hatched within a fortnight.

In the southern counties of Europe this bird can be purchased in the food markets towards the middle of autumn, when it has been feeding for some time on the ripe grapes and other fruit, and its flesh is in good condition. It is known to epicures under the name of Beccafico.

THE WAXWING,

(Bombycilla garrulus.)

PLATE XV .- FIGURE VI.

This species is often called the Bohemian Chatterer, a most inappropriate name, as it is rarer in Bohemia than in many other parts of Europe, and is also a remarkably silent bird. Its home is in the extreme northern regions of both Europe and America, and the elevated parts of Asia. In severe winters it advances southward, and is then met with in Germany, Switzerland, France, and the British Isles. Its

visits, however, to all these countries are extremely irregular. In some years it has appeared in Scotland and the northern counties of England in considerable numbers, and again, for several successive winters scarcely a specimen has been seen. In 1849 and 1850 the Waxwings were particularly abundant, no less than five hundred and eighty-six are recorded to have been killed, most of them in the month of January of the latter year. At this period a considerable number of individuals were obtained in the southern and south-eastern counties of England, but as a rule only a few isolated specimens find their way to these warmer parts.

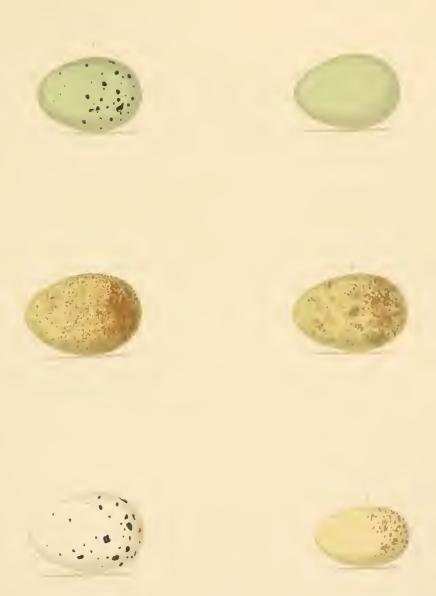
The Waxwing derives its name from a number of curious appendages to the quill feathers, resembling red sealing-wax. These are really prolongations of the horny shafts of the feathers beyond the webs. They vary in number from four to nine on each side, according to the age and sex of the bird. The general colour of the plumage is reddish grey, darkest on the back, and fading into greyish white beneath. The head is surmounted by a beautiful silky crest. The throat, and a band from the nostrils to the back of the head are black. The quill feathers are black, some tipped with white and others with yellow. The tail is also black, tipped with yellow. The male is about eight inches in length, and the female a little smaller.

Mr. Woelley, who visited Lapland in 1857, obtained no less than six hundred of the eggs of this bird. The nests were discovered in spruce and Scotch firs; they were placed at no great height from the ground, and composed of dry twigs and portions of the surrounding branches. The eggs are described as bluish or purplish white, thinly spotted and streaked with brown, black, or violet. Their number varies from four to seven. When a portion of Mr. Woelley's duplicate Waxwings' eggs were sold in Lendon in May, 1860, they fetched on an average £3 3s. each.

These birds have a light, graceful, and rapid flight, strongly resembling that of the Starling. On the ground they move heavily and clumsily. They roost amongst the thickest branches of trees and bushes; and in windy weather seek shelter very near the ground, or hide in the crevices of rocks in rocky countries. Their food consists of berries and insects; the latter they capture in the manner of the Flycatcher.

The song of the Waxwing is little more than a low twitter. "While singing," says Bechstein, "the bird alternately elevates and depresses its crest, and so squats in a heap, as to conceal all motion in the threat." The common call-note is described as a chirp frequently repeated.





THRUSHES, ETC.

1. Threash. 2. ...ck Parush. 3. Blackbird. 4. King Ouzel. 5. Golden Oriole. 6. Waxwing.



IN CONFINEMENT.

The Thrush is a very favourite cage bird on account of the sweetness of its song. It may be fed either upon the universal paste, or crushed barley-meal moistened with equal quantities of milk and water. In order to keep it in good song, a small quantity of finely shredded meat should be given it two or three times a week. Fresh air is essential to its health, and it should have a roomy cage, for if too closely confined it will mope and probably fall into a decline. If kept clean, and always well supplied with fresh water, both for bathing and drinking, the prisoner will be likely to live seven or eight years.

Bechstein says the Rock Thrush is sometimes kept in confinement in Germany, where a handsome cage usually distinguishes it as a rare bird. The male has a pleasing habit of singing by night, if placed near a lamp. It can be taught to whistle tunes, and to speak like a Starling.

The Blackbird is a most interesting and amusing pet; he should be reared from the nest on a diet of sop made of stale white bread and milk. It is most important that this food be never in the slightest degree sour; and he should be fed for the first few weeks every two hours from sunrise to suuset. As he grows older the universal paste may be gradually substituted, but he should frequently have a meal of lean shredded meat. If it is desired to teach him to whistle a tune, it is necessary that it be played to him slowly and distinctly on a flute or other wind instrument the first thing every morning, and the last at night. On each occasion, after it has been repeated about twenty times, the instructor should leave off and keep perfectly quiet to give him an opportunity of imitating it. His endeavours should be rewarded with a worm, which it is well to have placed in such a position that he can see it during the whole lesson. He will soon understand what is required of him, and do his best to obtain the prize. A tune once thoroughly learned by a Blackbird is rarely forgotten. This species sometimes attains a great age in confinement; the following instance of unusual longevity is recorded in the "Belfast Chronicle" of December 25th., 1839:—"There is at present in the possession of Mr. John Spence, of Tullaghgarley, near Ballymena, a Blackbird that has arrived

at the wonderful age of twenty years and nearly eight months. It was taken by him from the nest when young, and ever since has enjoyed the best of health. It still continues to sing, and that well."

The Ring Ouzel will live for six or seven years in an aviary, if treated in the manner recommended for the Thrush.

The beautiful Golden Oriole has been kept alive in confinement for several years, on a diet of bread and milk and dry ants' eggs. Bechstein says, "I have seen two young males, which had been reared from the nest, that beside the natural song, whistled, one a flourish of trumpets, and the other a minuet. The round, full, flute-like tone, rendered their song exceedingly pleasing."

The Waxwing is an attractive cage bird, on account of its beautiful silky plumage, but is otherwise particularly uninteresting, as it does little else than sit still and eat. It will keep in good health if fed on barley-meal moistened with water.

NUTHATCH, WRYNECK, CREEPER, SHRIKES, AND KINGFISHER.

THE only species now remaining to be described, in order to render our volume a complete "Natural History of the Smaller British Birds," are included in the group before us. Though only seven in number, they belong to no less than five distinct families. First the little Nuthatch represents the Sittinæ, a family remarkable for the restless and active habits of its members. Their legs and feet are short, while their claws are long, curved, and very sharp, this construction enabling them to move about over the trunks and branches with extreme rapidity, and to cling to them with perfect safety and security with the body downwards or in any position. They are full and compact in form, and have short necks, large heads, long wings, and short tails. Their beaks are straight, strong, and sharp. Only one species of Nuthatch is found in this country.

The Wryneck, one of the most delicately marked and beautiful of British birds, belongs to a family nearly allied to the Woodpeckers, and having the not very elegant name of *Yunx*. Its general torm is slight, and it has a rather short beak, wings of moderate length, and a longish tail.

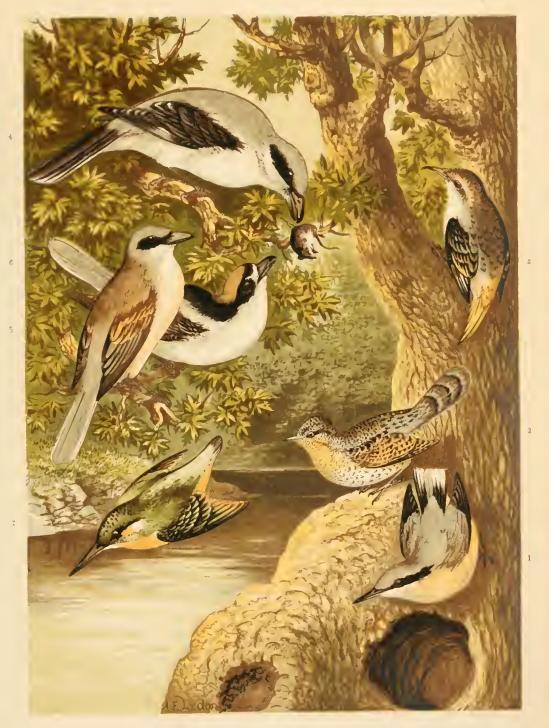
Next in order comes the diminutive Creeper, belonging to the Certhinæ. Short and slender bodies, wings of moderate length, and long tails, are the characteristics of this family.

The Shrikes belong to the Laniinæ. The only three British species included in this family are represented in our group—the Great Shrike, the Red-backed Shrike, and the Woodchat. All these birds have full compact bedies, short necks and legs, wings of moderate length, and long tails. Their habit of hanging upon thorns the insects and small animals they have captured for food, has given them the name of Butcher Birds. Macgillivray says, "They are generally unsocial birds, whose sympathies do not extend beyond the circle of their own family, tyrannical, and consequently disliked by their neighbours of the insectivorous tribes, many of whom exhibit as much alarm at their presence as they would on approaching a hawk."

The Kingfisher stands last on our list, but though last certainly not least, for a more exquisitely plumaged bird can scarcely be imagined.

"The emerald shines on his kingly head,
And his corset is of ruby red:
An emerald mantle is ou his back,
Varied with waves of ebon black;
And a lovely band of the brightest blue
Gives to the whole a glorious hue."

Most of the Alcedinæ are inhabitants of the warmer regions of the globe. They have stout bodies, short necks, large heads, short wings and tails, and very small feet. The habits of our British Kingfisher, fully described in the following pages, well represent these of the whole family.



HACH, F.

1 Nutra 2 : 3. (. 4. Feat Strike, 5.) 1. (6. Wouldnat, 7. (4. Feat Strike,



THE NUTHATCH,

(Sitta Europæa.)

PLATE XVI .-- FIGURE f.

THE Nuthatch, or Nutjobber as this interesting species is sometimes called, derives its names from its habit of feeding on the kernels of nuts, which it extracts from their shells in the following curious manner. Having firmly fixed the nuts in a chink or ereview in the bark of a tree, the bird hammers them repeatedly with his sharp-pointed bill until the shells are shattered. "During the operation," says the Rev. W. T. Bree, in Loudon's Magazine, "it sometimes happens that the nnt swerves from its fixture, and falls towards the ground; it has not descended, however, for the space of more than a few yards, when the Nuthatch, with admirable adroitness, recovers it in its fall, and replacing it in its former position, commences the attack afresh. The fall of the nut in the air, and its recovery by the bird on the wing, I have seen repeated several times in the space of a few minutes." Although nuts constitute the favourite food of this species, it also eats acorns, seeds, grain, caterpillars, and various kinds of insects.

This bird is found in most of the temperate and northern parts of Europe and Asia. In this country it occurs chiefly in the southern and midland cennties, but is nowhere very abundant. In Ireland and Scotland it does not appear to have been observed. Its favourite resorts are woods and parks containing large oaks or beech trees; here it may be seen climbing about upon the trunks and larger arms with remarkable case and rapidity. Its feet and claws are of unusual construction, and specially adapted for holding on to the rugged bark, so that it can even hang head downwards from the under surface of a limb with perfect security. Yarrell says, "the Nuthatch creeps or runs along so smoothly that its motions more resemble those of a mouse than those of a bird."

The Nuthatch usually constructs its nest in a hollow in the trunk

of an old tree. If the opening is large the intending resident plasters it up with clay, leaving just sufficient room to admit of the passage of its body. Within the chamber, dry leaves, moss and grass are heaped together to form a lining. The eggs, from six to eight in number, are greyish white, spotted with reddish brown. The note of this bird resembles the syllables 'quit, quit;' it is mellow and flute-like, and may be heard at a considerable distance.

An interesting anecdote of the Nuthatch is related by Bechstein in his "Cage Birds:"-"A lady amused herself in winter with throwing seeds on the terrace below the window, to feed the birds in the neighbourhood. She put some hemp-seed and cracked nuts even on the window-sill, and on a board, particularly for her favourites, the Blue Tits. Two Nuthatches came one day to have their share in this repast, and were so well pleased that they became quite familiar, and did not even go away in the following spring to get their natural food and to build their nest in the wood. They settled themselves in the hollow of an old tree near the house. As soon as the two young ones, which they reared here, were able to fly, they brought them to the hospitable window where they were to be nourished, and soon after disappeared entirely. It was amusing to see the two new visitors hang or climb on the walls or blinds, while their benefactress put their food on the board. These pretty creatures, as well as the Tits, knew her so well, that when she drove away the Sparrows which came to steal what was not intended for them, they did not fly away also, but seemed to know that what was done was only to protect and defend them. They remained near the house for the whole summer, rarely wandering, till one fatal day, at the beginning of the sporting season, in autumn, when on hearing the report of a gun, they disappeared, and were never seen again."

The adult male weighs about six drachms, and is about five inches and three quarters in length. The upper parts of the bedy are bluish grey; the cheeks and threat are white. A black band runs from the beak beneath the eye, and for some distance down the sides of the head. The lower parts are light reddish yellow. The female is a little smaller than the male, and has the tiuts of her plumage somewhat paler.

THE WRYNECK,

(Yunx torquilla.)

PLATE XVI .- FIGURE II.

ALTHOUGH the plumage of the Wryneck is neither brilliant nor rich in colouring, it is so delicately marked and shaded, as to render the bird one of the most beautiful and attractive of British species. The upper parts are light brownish grey, marked and spotted with a deeper shade. A broad stripe of dark brown runs from the top of the head half way down the back. The cheeks, throat, and upper part of the breast are reddish yellow, covered with fine wavy lines of black. The under surface of the body is yellowish white. The wings and tail are beautifully marked and mottled with various shades of reddish and brownish black.

The Wryneck is common in the south-eastern counties of England, but decreases in numbers towards the northern and western parts. Its name is derived from a curious habit it has of twisting and turning its head about in various directions, sometimes only from side to side, but at others quite round. These grotesque movements it accompanies with a fanning of the tail, and a general bowing and dipping of the whole body. In some parts of the country this twisting of the neck, and a hissing noise it makes when surprised on its nest, have obtained for it the name of the Snake-bird. In other places it is called the Cuckoo's Mato or Messenger, because it arrives about the same time, or a little earlier than the Cuckoo.

The Wrynecks are unsocial birds, more than a pair being rarely seen in company; they frequent woods, plantations, orchards, and gardens, and may often be seen along the sides of ditches, or upon sunny banks and ant-hills. If disturbed they do not usually fly to any great distance, but hide among the nearest foliage. Their movements are awkward, both on the wing and on the ground.

The food of this bird consists chiefly of ants and their eggs, which it obtains by means of its long and sharp-pointed tongue. "A quantity

of mould," says Montagu, "with emmets and their eggs, was given to one of these birds confined in a cage; and it was curious to observe the tongue darted forward and retracted with such velocity, and with such unerring aim, that it never returned without an ant or an egg adhering to it, not transfixed by the horny point, as some have imagined, but retained by a peculiar tenacious moisture, by nature provided for that purpose." The Wryneck eats other kinds of insects besides auts, and has been known to feed upon elderberries.

But little care is bestowed by the Wryneck on the construction of its nest. It usually selects some hollow in an apple or other tree, and having scraped together the mouldered wood, deposits its eggs thereon. The eggs, from six to ten in number, are pure white. The same spot is resorted to for several successive years. The young are hatched in about fourteen days, and are fed upon ants and caterpillars.

The Wryneck has no song; his note resembles that of the Hawk, and is likened to the syllables 'qui, qui, qui.'

THE CREEPER,

(Certhia familiaris.)

PLATE XVI .-- FIGURE III.

This interesting little creature is plentiful in nearly all parts of the European continent. In the British Isles it is generally distributed, frequenting wooded districts, parks, and plantations. Although not particularly shy, its colour so closely resembles the bark of the trees, over which it climbs or creeps by means of its sharp curved claws, that an observer has some difficulty in detecting its presence even where it is abundant. The difficulty is increased by its habit of running round to the opposite side of the trunk or branch as soon as it is approached. It is far oftener heard than seen, as it emits at every jerky movement of its body a shrill but feeble cry. Maegillivray thus describes its ordinary course of action.—"It alights at the bottom of a tree, clinging to the bark with its claws, and without a moment's delay begins to ascend, which it does by short starts, leaping forward as it were, and supporting itself by pressing the tail against the bark. In this manner it proceeds, diligently searching for insects, which it picks out with the greatest dexterity."

These diminutive birds are rarely seen in flocks, although a few individuals often accompany the flocks of Tits and Kinglets during the winter. Their flight is rapid and undulated, but generally short—merely from one tree to another. While on the wing they utter their cry very constantly. They pair early in April, and build about the end of that month. The nest is generally placed in some hollow in the trunk of a tree, and consists of twigs, grass, fibrous roots, and pieces of bark; these are bound together with spiders' webs and the cocoons of chrysalides, and the whole is lined with feathers. Gilbert White says, "A pair of Creepers built at one end of the parsonage house at Greatham. It was very amusing to see them run, creeping up the walls with the agility of a mouse." The eggs, from five to eight in number, are white, spotted with brownish red chiefly at the larger end. The parents sit on the nest by turns, and the young are hatched in thirteen days.

This tiny bird only weighs about two drachms; its plumage is very soft and silky. The upper part of the head is dark brown, with the centre of each feather of a lighter tint. The back is yellowish brown, streaked with pale greyish brown. The wings are dusky and nearly crossed by a whitish band. The tail is greyish brown. The chin, throat, and under surface of the body are silvery white.

THE GREAT SHRIKE,

(Lanius excubitor.)

PLATE XVI .- FIGURE IV.

The Great Shrike is not a regular visitor to the British Isles, but a considerable number of specimens have been obtained in England, and a few in Scotland and Ireland, chiefly during the winter months. It is common in most other European countries, and throughout a large portion of Asia, Northern Africa, and North America.

Its popular name, Butcher Bird, and its generic title, which has the same meaning, have been applied to it on account of the manner in which it slaughters smaller birds, mice, lizards, and insects of all kinds for food. Having deprived them of life by repeated blows on the head with its bill, it affixes them to a thorn, or wedges them into the fork

of a branch, that it may tear them in pieces at its leisure. On the continent this bird is made use of by trappers of Falcons. It is fixed to the ground, and gives notice by its loud screams of the approach of a Hawk. Some suppose that it has on this account been called 'excubitor'—the sentinel; but Macgillivray thinks it more probable that it has obtained the name from its habit of remaining perched in one position, on a twig or decayed branch, for a long time together, when on the look out for prey. Few birds are more courageous than the Great Shrike; it will attack those that are considerably larger than itself, and will allow no Hawk or Magpie to approach its nest.

On the continent this species is to be met with in woods and forests; it places its nest at a considerable elevation, in the fork of a branch, forming it of grass, moss, and fine roots, and lining it with wool, down, or hair. The eggs, from four to seven in number, are of a greyish or reddish white colour, spotted at the thicker end with reddish brown and purple. The parents exhibit a very strong affection for their young, and raise loud eries if any intruder approaches the nest.

The Great Shrike is said to have a 'very pleasing sort of warbling song.' Its common call-note is likened by Meyer to the words 'shack, shack.' Possessing considerable flexibility of voice, it imitates with case the notes of other birds, for the purpose, it is supposed, of luring them to destruction. A writer in "The Naturalist" says, "My first acquaintance with the Butcher Bird was occasioned by hearing notes not entirely familiar to me, though much resembling those of the Stonechat. Following the sound, I soon discovered the utterer; and while listening, to my surprise, the original notes were discarded, and others adopted of a softer and more melodious character, never, however, prolonged to anything like a continuous song."

The full-grown male of this species is from nine to ten inches in length, and weighs a little over two onnces. The head, neck, back, and wing coverts are ash grey, and the lower parts of the body white. A black band runs from the base of the beak, under the eye, and for some distance beyond. The wings and tail are black, the former barred, and the latter edged with white. The female resembles the male, but, as is frequently the case, has her plumage of a lighter tint.

THE RED-BACKED SHRIKE

(Lanus collurio.)

ELATE XVI .- FIGURE 7.

This species is not uncommon in the southern counties of England, but becomes rare towards the northern, and is not found in either Scotland or Ireland. It is only a summer visitor to our shores, arriving about the beginning of April, and departing again in September. Like the Grey Shriko it affixes to thorns the small animals and insects it captures for food, either for the purpose of the more easily tearing them in pieces, or, as some have supposed, of attracting small birds to its neighbourhood. We have now before us some thorns with bees affixed to the points, most probably by either this species or the last. They were procured from a hedge adjoining a small group of trees and bushes near Minster, in the Isle of Sheppey, and previous to being broken off had been observed with a number of similar ones for upwards of a week. They do not appear to have received the slightest injury, any further than that occasioned by the entry of the thern into the thorax, a fact that seems to favour the supposition that they have simply been used as baits. This bird has been known to drag young Pheasants through the bars of the breeding coops, and to attack the decoy birds of fowlers. On one occasion it was soon in pursuit of a Blackbird.

The Red-backed Shrike is not a neat or careful builder; it forms a large and loosely-compacted nest of twigs, grass, and moss, and lines it with wool. The eggs, five or six in number, vary greatly in colour; in general they are pale reddish white, spotted with red and reddish brown; sometimes they are bluish white, spotted with brown, red, or grey. The old birds are very noisy if any person approaches the nest. Meyer says, "We have seen them help the young ones out of the nest for the purpose of hiding them in the thicket beneath; and the moment they have reached the ground, not another chirp is heard from the nestlings, which have apparently received a signal to be quiet, although

the parent birds, perched in a tree at a little distance, keep up a continual clamonr." This species has a chirping note, resembling that of the Sparrow, and, like its larger relation, is said to imitate in a broken manner the songs of other birds.

The male has the head and neck grey; the back and wing coverts chesnut brown; the chin nearly white; and the breast and sides rose-coloured. A band of black runs from the beak to behind the ear-The wings are black, edged with brownish red. The tail feathers are dusky black, with the larger half of the outer ones white nearest the body. The female has the upper parts reddish brown, and the lower greyish white, with waved dusky lines.

THE WOODCHAT,

(Lanius rufus.)

PLATE XVI. - FIGURE VI.

This is another species of Shrike, or Butcher Bird, but of much rarer occurrence in this country than either of the two already described, the whole number of specimens obtained only amounting to about a dozen. On the continent it visits Germany, France, Switzerland, Italy, Greece, and Holland, but is never met with in the northern countries. In Africa, where it is said to be a permanent resident, it is found in Egypt, Senegal, and the Cape of Good Hope.

In form the Woodchat resembles the Great Shrike, but it is much inferior in size. Its plumage, though somewhat similar to that bird's, is in general much darker, the forehead and back being black, and the crown of the head and nape of the neck rich chesnut red.

In its habits this species resembles the other Shrikes; its food is of the same kind, and it deals with it in a similar butcher-like fashion. On one occasion an individual was seen fixing a Yellow-Hammer on a thorn. Its nest, as described by Mr. Hoy, in Loudon's "Magazine of Natural History," is composed externally of sticks, wool, and moss, and lined with fine grass and wool. It is placed in the fork of a projecting branch of an oak, or other large tree. The eggs, four or five in number, are rather smaller than those of the Red-backed Shrike, and vary much in colour and markings; in some the ground is pale

blue, and in others dirty white; the spots are usually of a rust-colour, either collected in a zone around the larger end, or dispersed over the surface. Both parents sit on the nest by turns, and the young are hatched in about a fortnight.

THE KINGFISHER,

(Alcedo ispida.)

PLATE XVI .- FIGURE VII.

Few of our British birds will bear comparison with the Kingfisher for brilliancy of colouring, although many are far more elegant in shape. Indeed his thick body, large head, immense bill, diminutive feet, and short stumpy tail would render him altogether a most unattractive object were it not for the splendid tints of blue, and green, and gold, that gleam and flash from his plumage. These so delight the eye of the observer with their beauty and richness as to cause him to scarcely notice the form and proportions of the body they cover.

The Kingfisher is common in suitable localities in nearly all parts of Great Britain, and is generally distributed over the European continent. It is also found in Asia and Africa. The banks of still rivers. brooks, and ponds are its favourite resorts. Here it preys on the small fish that sport in the clear water, and the numerous insects that dart over its surface. Macgillivray most graphically describes the manner in which it procures its food. Bidding his readers follow him in fancy to the banks of a woodland stream, he says, "See, perched on the stump of a decayed willow jutting out from the bank, stands a Kingfisher, still and silent, and ever watchful. Let us creep a little nearer. that we may observe him to more advantage. There he is, grasping the splint with his tiny red feet, his bright blue back glistening in the sunshine, his ruddy breast reflected from the pool beneath, his long dagger-like bill pointed downwards, and his eyo intent on the minnows that swarm among the roots of the old tree that project into the water from the crumbling bank. He stoops, opens his wings a little, shoots downwards, plunges headlong into the water, re-appears in a moment, flutters, sweeps off in a curved line, wheels round, and returns to his post. The minnow in his bill he beats against the decayed stump

until it is dead, then, tossing up his head, swallows it, and resumes his ordinary posture, as if nothing had happened."

The deserted hole of a water-rat generally forms the nestling place of the Kingfisher. The hole is said to be frequently enlarged or altered by the new tenant to snit its convenience. Some authors assert that the bird often excavates the tunnel itself, loosening the earth or sand with its bill, and pushing it out backwards with its feet. Although no person appears to have witnessed the operation with our British Kingfisher, it is stated as an observed fact by Audubon that the American species thus digs its own nest chamber. The direction of the excavation is always upwards in a nearly straight line, and it penetrates three or four feet into the bank. The further end is scooped into a slight hollow, in which are deposited a number of small fish bones mixed with earth. Upon this hard bed are laid six or seven smooth and nearly round eggs. Their shells are pure white, but so transparent as to take a delicate pink tinge from the colour of the yolk. The food of the young birds is disgorged from the stomachs of their parents. The young do not leave the nest until fully fledged and able to fly.

The Kingfisher has a direct and rapid flight; its short wings beating the air so quickly as to be almost invisible. Its note is a shrill pipe, similar to that of the Sandpiper.

In ancient times this bird was called the Haleyon, and it was believed that while the female was hatching her eggs she had the power of keeping the water calm and unruffled. This power was supposed to be exerted not only upon all rivers and streams, but extended even to the ocean. The period of incubation was therefore called the Haleyon Days, and was considered the safest part of the year for mariners to put to sea, as they were then secure from storms and tempests.

Shakespeare, in King Lear, speaks of rogues, who

"Turn their Haleyon beaks With every gale and vary of their masters."

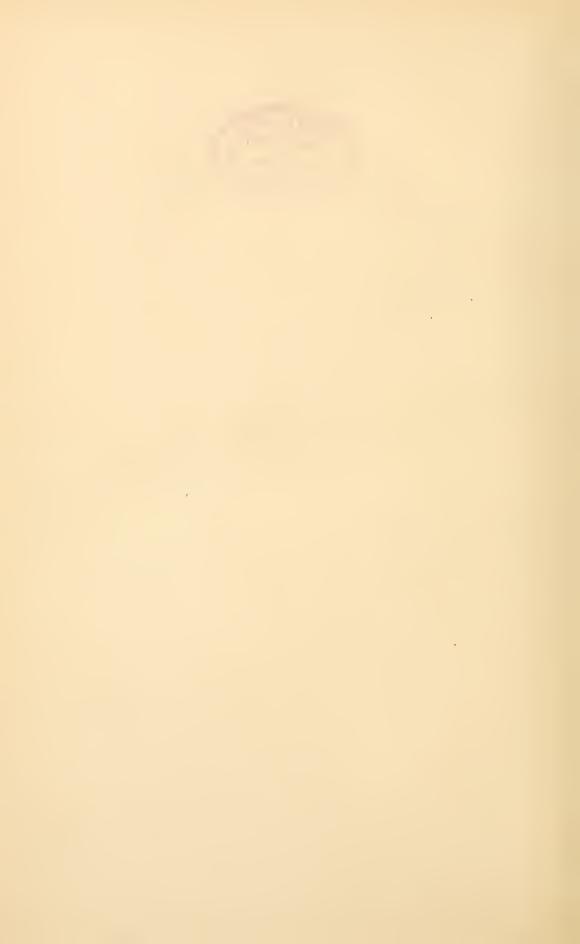
This has reference to a superstition that a dead Kingfisher, if carefully balanced and suspended by a single thread, would always turn its beak to that point of the compass from which the wind blew.

The adult male of this handsome species has the top of the head deep olive green, with each feather tipped with light blue. The upper part of the back dark green, and the lower light greenish blue. A band of yellowish red extends from the nostril to the eye, and a similar band runs from the eye backwards. Below these bands, and extending



NUTHATCH, ETC.

1 Nuthatch. 2. Wryneck. 3. Creeper. 1. Great Shrike.
5. Red-backed Shrike. 6. Woodchat. 7. Kingfisher.



from the lower mandible, is another of greenish blue, terminating behind in a patch of white. The throat is yellowish white, and the rest of the lower part of the body yellowish red. The wing coverts are greenish blue, and the pen feathers blackish. The tail is dark blue. The female is similar in colour, but rather darker.

IN CONFINEMENT.

Bechstein includes the Nuthatch among the birds 'tameable when old.' He says, "in confinement it may be fed on hemp-seed and barley-meal, and will also eat oats and bread. The oats it has often been seen to fix one by one in the joints of the floor, and always with the thinner end uppermost, that they might be split with less difficulty."

The Wryneck is esteemed as a cage bird, both on account of its handsome plumage, and the grotesque habit from which it derives its name. If not allowed the range of the aviary, it requires a roomy cage. The universal paste will agree with it, but it is a delicate bird, and will not live long unless frequently supplied with its natural food—ants and their eggs.

We know of no instance of the little Creeper being kept in confinement, and can therefore give no information concerning its mode of treatment.

The habits of the Shrikes and Woodchat do not render them very desirable birds to keep in confinement. When first caught they require to be fed upon insects, such as grasshoppers or beetles, and small animals. After a little while they will take raw or cooked meat. They should be kept in wire cages apart from all other birds, and require a plentiful supply of water. Mr. Yarrell quotes the following portion of a letter from Mr. H. Doubleday, of Epping, with reference to the Great Shrike:—"An old bird of this species taken near Norwich, in October, 1835, lived in my possession twelve months. It became very tame, and would readily take its food from my hands. When a bird was given it, it invariably broke the skull, and generally ate the head first. It sometimes held the bird in its claws, and pulled it to pieces in the manner of Hawks, but seemed to prefer forcing part of it through the wires, then pulling at it. It always hung what it could not eat up on the sides of the cage. It would often eat three small

birds in a day." After such a description few of our lady readers, wo should faucy, would desire to make a pet of a bird of this species.

The Kingfisher is described by Bechstein as "an awkward and obstinate inmate of an aviary," so we would recommend our readers to let him remain in the enjoyment of his beautiful home by the silvery stream or plashing waterfall, and not to deprive him of pleasures for which they can give no compensation.

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